1 - SEC - 1

Reference:

Exhibit 1

Question:

Please provide all material provided to the Applicant's Board of Directors regarding its approval of this application and the underlying budgets.

Response:

Please see the response to AMPCO - 2.

1 - SEC - 2

Reference:

Exhibit 1

Question:

Please provide copies of all benchmarking studies, reports, and analysis that the Applicant has undertaken or participated in since its last rebasing application in 2009, that are not already included in the application.

Response:

ENWIN as well as all LDC's in Ontario have access to a variety of information in order to conduct benchmarking, including the following:

- Electricity distributor yearbooks;
- Electricity utility scorecards, including:
  - Customer Satisfaction Survey results
  - Public Awareness of Electrical Safety Survey results;
  - Pacific Economics Group Research, LLC ("PEG") annual benchmarking update reports; and
- Electricity distribution rates databases.

ENWIN has not included all of the above information as part of the response to this interrogatory due to the large volume information requested. The above information is generally already publicly available through the OEB's website.

In addition to these sources of data, ENWIN has also from time to time conducted benchmarking utilizing outside service providers. Some examples of this type of benchmarking are appended to this response, and are itemized, below:

- 2010 Utility Performance Management Survey (SEC 2 - Attachment 1)
- 2011 Utility Performance Management Survey (SEC 2 - Attachment 2)
- 2012 Utility Performance Management Survey (SEC 2 - Attachment 3)
- 2016 Scorecard Comparison Report (SEC 2 - Attachment 4)
- Salary Survey (SEC 2 - Attachment 5)

THE MEARIE GROUP

UPM Survey

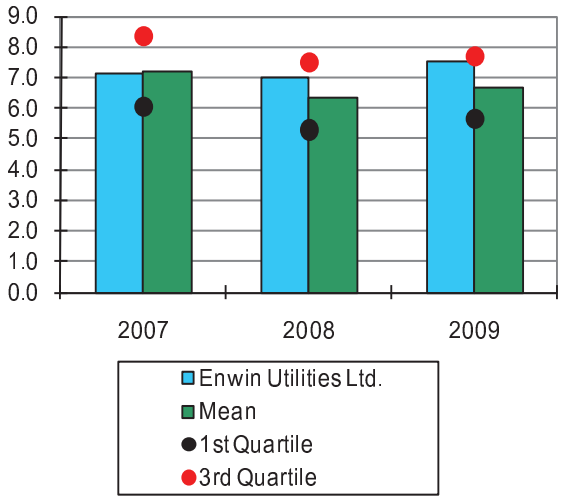
2010

Performance Scorecard

ENWIN Utilities Ltd.

1. Profitability

FR300: Operating Margin (%)

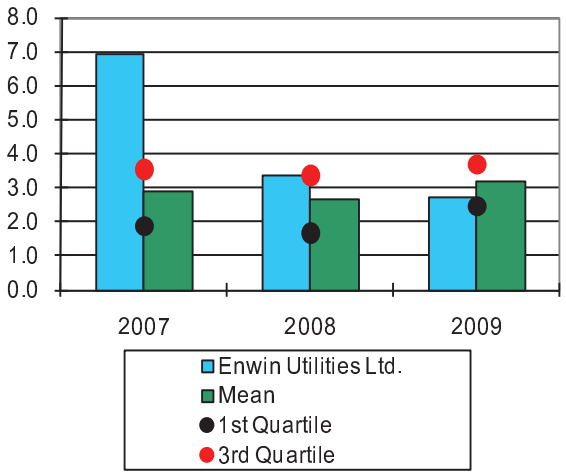


Operating Margin is defined as:

$$\frac{\text{EBIT}}{\text{Total Electricity Revenue}}$$

Operating margin reflects the profitability of the company as influenced by management decisions (interest and taxes are excluded). The higher the operating margin, the more profitable is the company's core business. This ratio indicates that your LDC is more effective than most participants at managing your costs and contributing to the profitability of your business.

FR310: Net Margin (%)

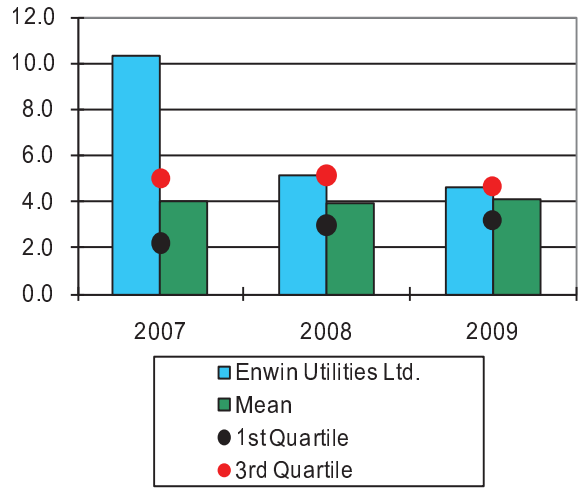


Net Margin is defined as:

$$\frac{\text{Net Income}}{\text{Total Electricity Revenue}}$$

Net margin is a measure of corporate profitability and a good way of comparing companies in the same industry, since such companies are generally subject to similar business conditions. Your LDC has fallen below average with respect to this financial indicator although you are generating sufficient income to cover financial expenses as well as operating expenses.

FR290: Return on Capital Employed (%)

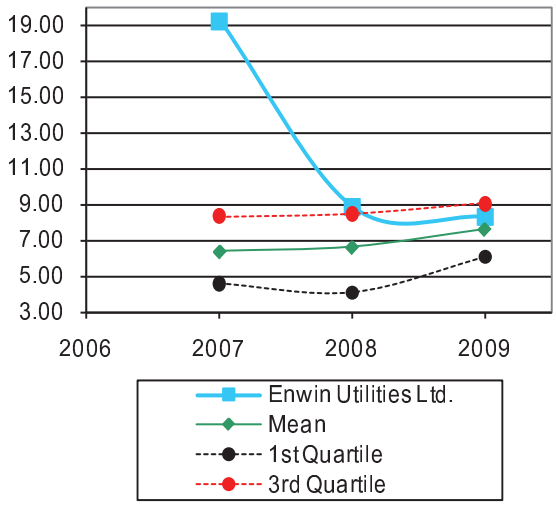


ROCE is defined as:

$$\frac{\text{Net Income}}{\text{Equity + Debt– (Cash+ Short Term Investments)}}$$

This ratio measures profit per dollar of capital employed.
It is similar to Return on Assets but takes into account the sources of financing. It is commonly used as a measure for assessing whether a business generates enough returns to pay for its cost of capital. Your LDC is realizing greater returns from capital employed than most participants.

FR250: Return on Equity (%)



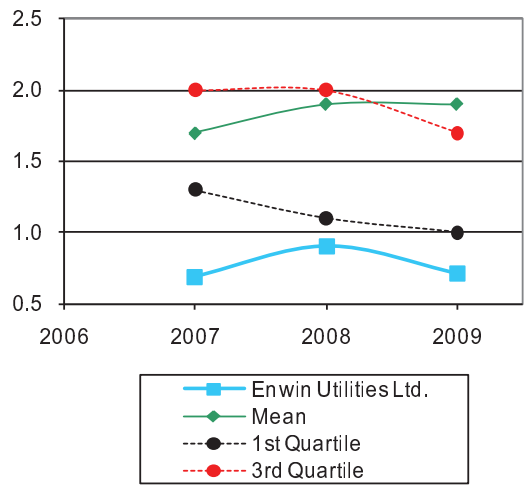
ROE is defined as:

$$\frac{\text{Net Income}}{\text{Total Equity}}$$
(Including share capital and retained earnings)

This ratio measures profit per dollar of equity. Your LDC is above the average of participating LDCs.

2. Financial Strength

FR030: Current Ratio



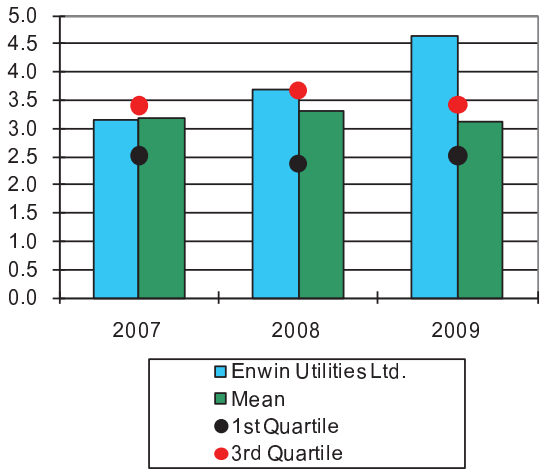
Current ratio is defined as:

$$\frac{\text{Current Assets}}{\text{Current Liabilities}}$$

It is a measure of the utility's liquidity. You are in the bottom quartile for this metric, meaning that you may be less able to meet your short term financial obligations than many of your peer LDCs.

It should be noted that when current liabilities exceed current assets (the current ratio is below 1), a company may have problems meeting its short-term obligations.

FR320: Interest Coverage Ratio

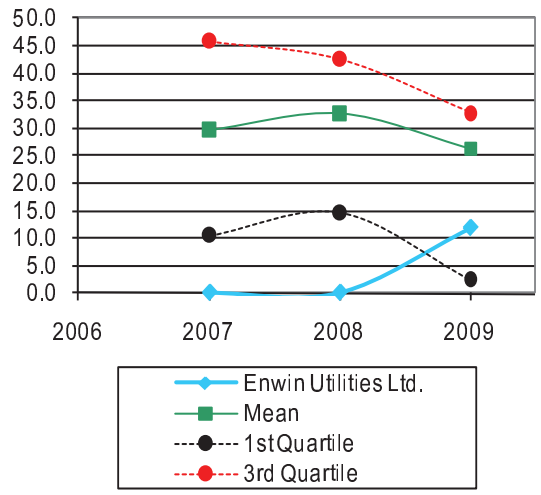


The Interest Coverage Ratio is calculated as:

$$\frac{\text{EBIT}}{\text{Expenses} - \text{Financial}}$$

It is a measure of a company's ability to honour its debt payments. Your LDC has a higher value for this ratio than most LDCs.

FR040: Number of Days Cash Reserve

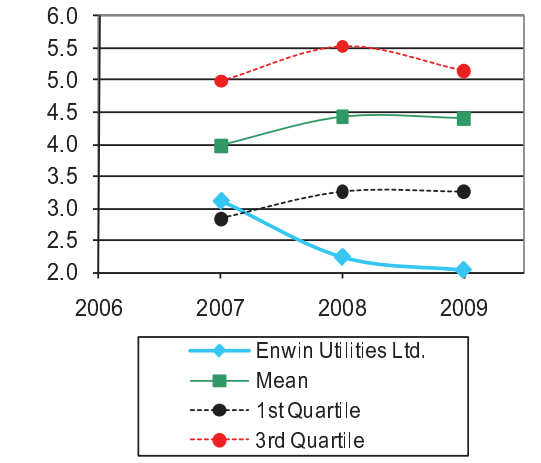


This ratio is defined as:

$$\frac{\text{Cash + Short Term Investments}}{\text{(Cost of Power, Operations, Maintenance, Admin., Financing charges, and Capital Expenditures) / 365}}$$

This ratio measures the utility's ability to meet its short term cash requirements. Your results indicate that you may want to review your levels of cash and short term investments. Because your number of days reserve is lower than the mean, you may not be as able to meet your short term cash requirements as the average survey participant.

FR140: Operating Ratio (%)



Operating Ratio is defined as

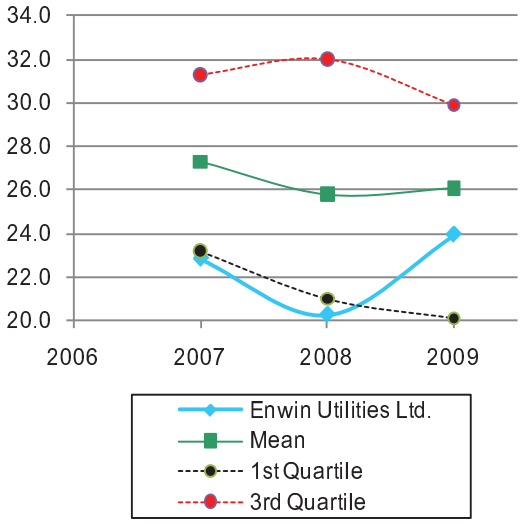
$$\frac{\text{Total O \& M Expenses}}{\text{Total Revenue}}$$

This ratio provides an indication of the utility's effectiveness in managing operation and maintenance costs as a percent of its total electricity revenue.

Your results indicate a lower level of O&M costs per revenue than most LDCs Influences include the age of the plant and the amount of plant replacement carried out by the utility.

3. Asset Utilization

FR050: Number of Days Sales Outstanding

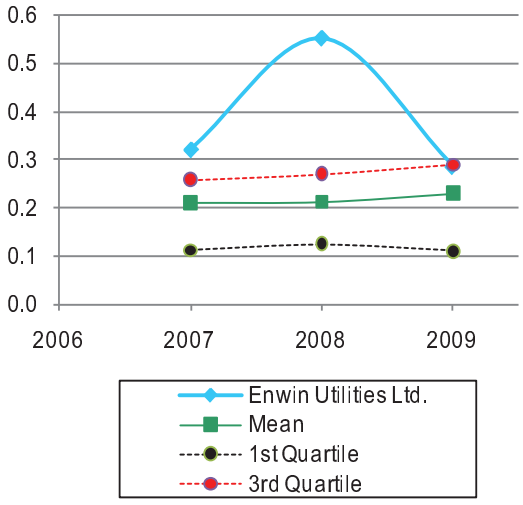


This ratio is defined as:

Accounts Receivable: Electrical Energy at year end
(Total Service Revenue / **365**)

This ratio relates to the utility's ability to expedite the collection of its accounts receivable related to the sale of energy. It is influenced by utility collection practices and, together with the ratio Number of Days of Unbilled Revenue, will provide an indication of the utility's ability to manage its major accounts receivable balances. You are below average in this area, reflecting better billing and collections practices than other LDCs.

FR100: Bad Debt as % of Revenue

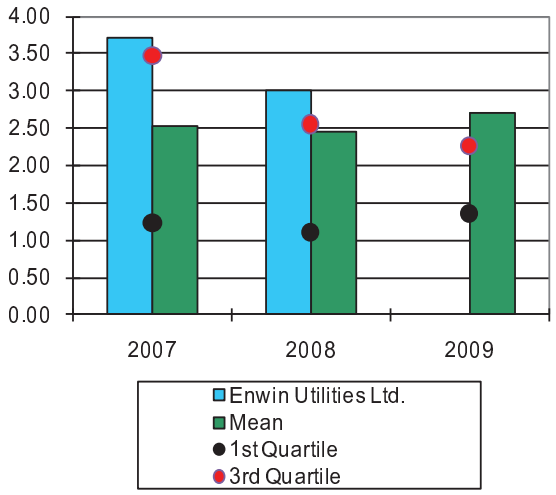


This ratio is defined as:

Bad Debt
Total Revenue

It indicates how effectively a utility is collecting revenue - the lower the percentage, the more effective the utility is at collecting service revenue.
Major variances from year to year may result from economic conditions, or from large customers becoming insolvent.
You are above average for this ratio, meaning that there may be room for improvement in addressing bad debt.

ER140: Inventory Turnover Ratio

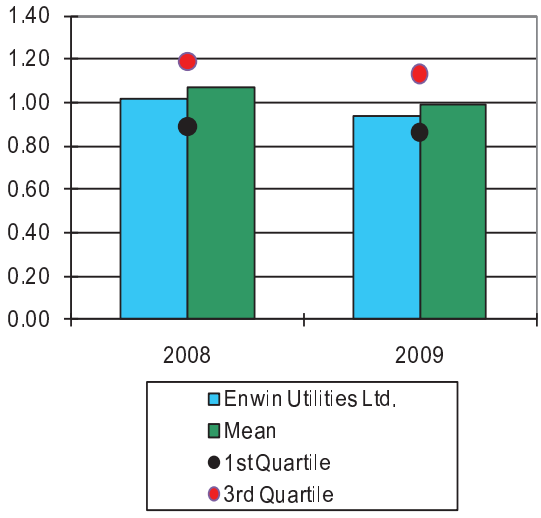


This ratio is defined as:

$$\frac{\text{Full Year of Cost of Materials Used}}{\text{Average Inventory}}$$

This ratio indicates how effectively a utility is managing its inventory. Your results indicate that you had a high rate of inventory turnover during a typical operating cycle in 2007 and 2008 and no inventory turnover in 2009.

ER160: Asset Efficiency



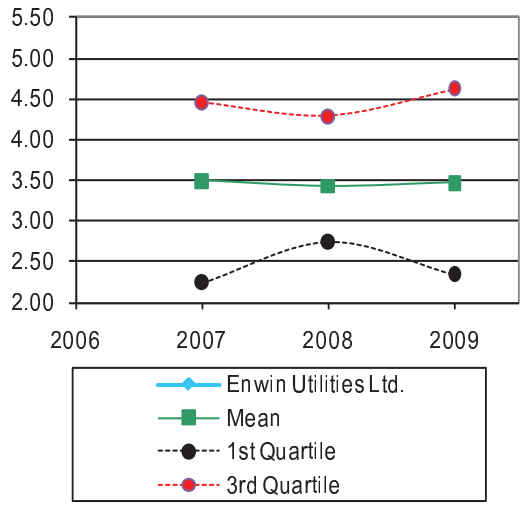
Asset Efficiency is defined as:

$$\frac{\text{Total Electricity Service Revenue}}{\text{Net Assets}}$$

The higher this ratio, the greater the revenue generated from existing assets. Your LDC is at the average on this measure of efficiency.

4. Employees

MR020: Short Term Absenteeism: Days per FTE

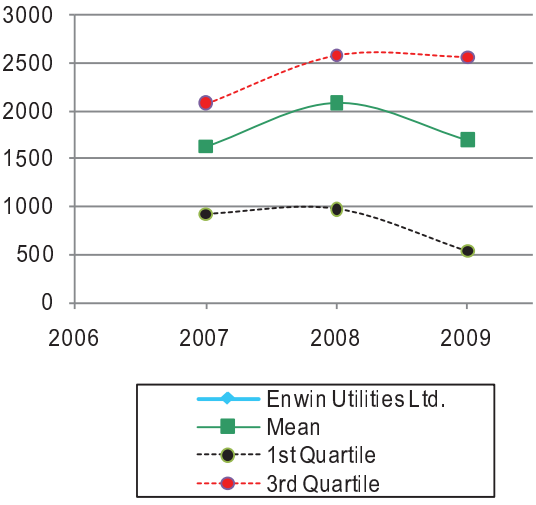


This ratio is defined as:

$$\frac{\text{Number of Short Term Absences}}{\text{Number of FTEs}}$$

This ratio calculates the number of work days lost due to short term absenteeism (5 days or less) per FTE. Absenteeism may be an indicator of employee satisfaction and/or health or safety or environmental conditions at the utility. Although you do not currently track this metric, it might of interest you to know that the average number of days lost due to short term absenteeism has stayed relatively constant over the last three years.

MR070: Staff Development Expenses per FTE



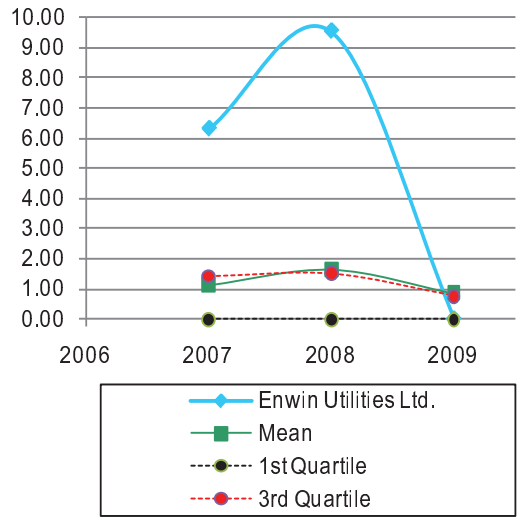
This ratio is defined as:

$$\frac{\text{Total Costs of Staff Development}}{\text{Number of FTEs}}$$

This ratio indicates the average cost spent per employee on staff development.

Although you do not currently track this metric, it might interest you to know that spending on staff development has decreased slightly for most LDCs over the last year.

MR040: Accidents: Frequency per 200,000 hours



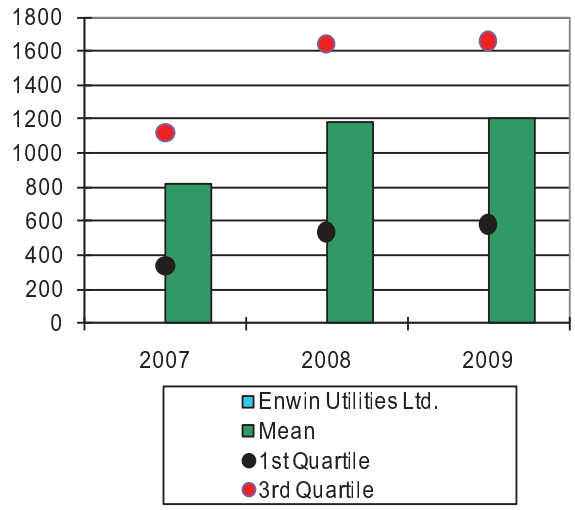
This ratio is defined as:

$$\frac{\text{Number of Compensable Injuries}}{\text{Number of Employee Hours Worked}} \times 200{,}000$$

It demonstrates the trend in frequency of on-the-job accidents. Only injuries where compensation is paid are included in this figure. A high accident frequency may indicate that more safety training is needed.

In comparison to your peers, compensable injuries have become less frequent at your location.

MR090: Cost of Safety Training per FTE

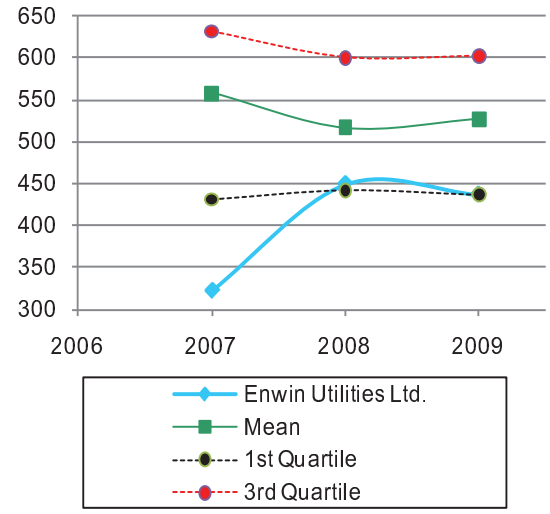


This ratio is defined as:

$$\frac{\text{Cost of Training on Safe Work Practices}}{\text{Number of FTEs}}$$

This ratio indicates the average cost spent per employee on safety training. It can be looked at in conjunction with MR040: Accidents: Frequency per 200,000 hours. Although you do not currently track this metric, it might interest you to know that the average cost of safety training per FTE has increased over the last three years.

S16: Number of Customers Per FTE

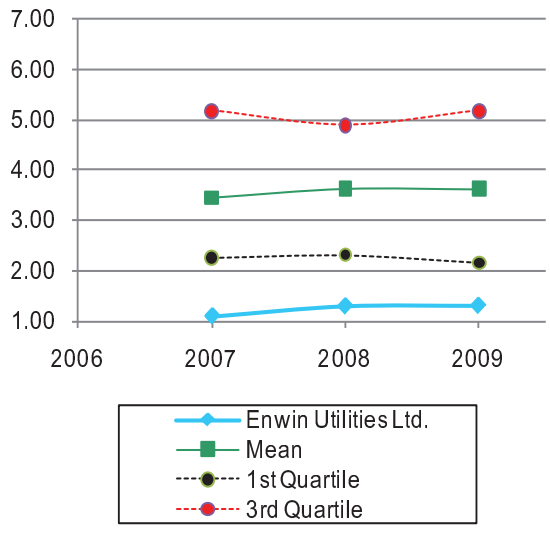


This ratio is defined as:

$$\frac{\text{Total Customers}}{\text{Total FTEs}}$$

This ratio is a traditional indicator of corporate performance; the greater the number of customers per employee, generally the more productive and efficient the organization. Your results indicate a lower than average ratio. This ratio should not however be looked at in isolation. A high number could indicate industry growth if the total number of customers has increased year over year.

MR030: Overtime Hours as a % of Regular Hours



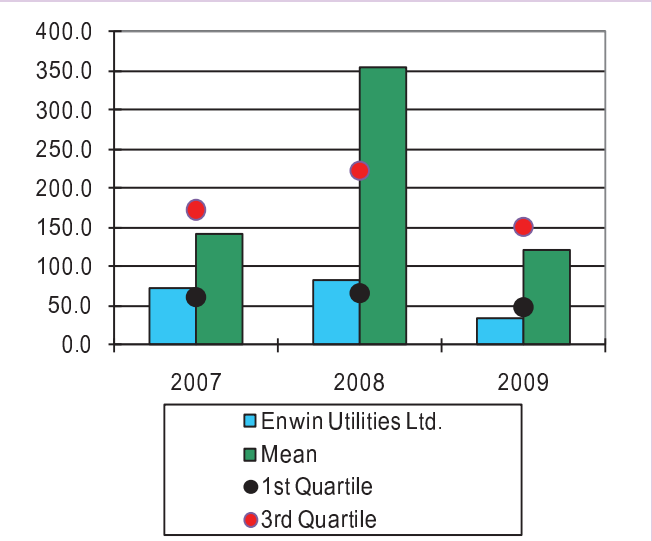
This ratio is defined as:

$$\frac{\text{Overtime Hours Worked}}{\text{Total Regular Hours}}$$

Your employees have worked less overtime as compared with other LDCs over the last three years. This measure provides an indication of how utilities manage their workload.

5. Customers

SR180: Total Outage Minutes per Customer



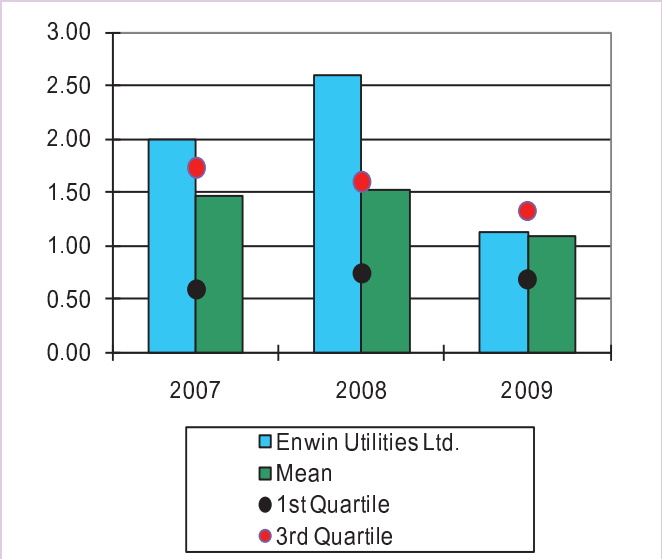
This ratio is defined as:

$$\frac{\text{Customer minutes of Interruption}}{\text{Number of Customers}}$$

This ratio takes into account total outage minutes per customer, including those caused by supply (Code 2). A higher ratio can be caused by such things as severe weather or by lack of adequate responsiveness on the part of the LDC.

In the last three years, you had a smaller number of outage minutes per customer than many LDCs.

SR090: SAIFI: LDC Distribution System

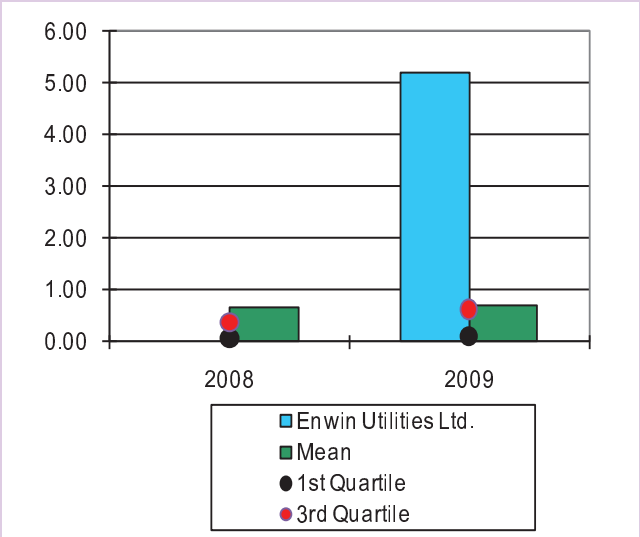


SAIFI is defined as:

$$\frac{\text{Total Number of Customer Interruptions}}{\text{Total Number of Customers}}$$

SAIFI is commonly used as a reliability indicator because it calculates the average number of interruptions that a customer would experience in a year. It is measured in units of interruptions per customer and it looks at the interruptions caused by the distribution system only. According to IEEE Standard 1366, the median value for North American utilities is approximately 1.10 interruptions per customer.
Your results indicate that you are at the average of the participating LDCs for this measure of system reliability.

CR100: Percent of Bills Cancelled and Re-issued

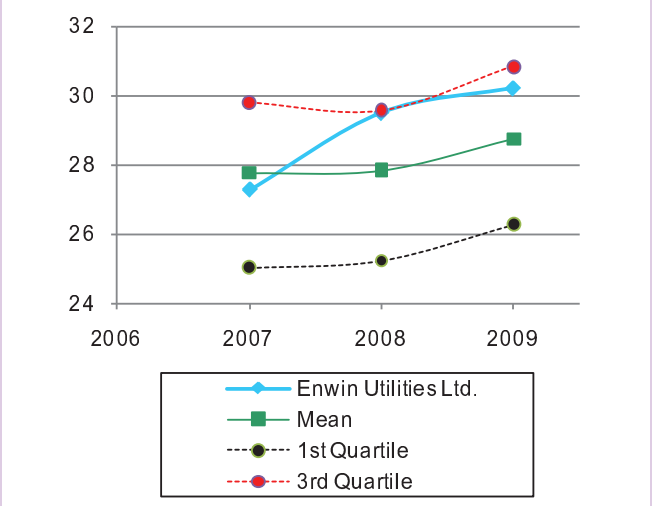


The calculation for this ratio is:

$$\frac{\text{Number of bills cancelled \& reissued}}{\text{Total number of bills issued}}$$

You have a higher than average rate of bill cancellation and re-issue. This may reflect errors in bill preparation that should be reviewed.

S172: Monthly Bill for 1000kWh Residential Customers

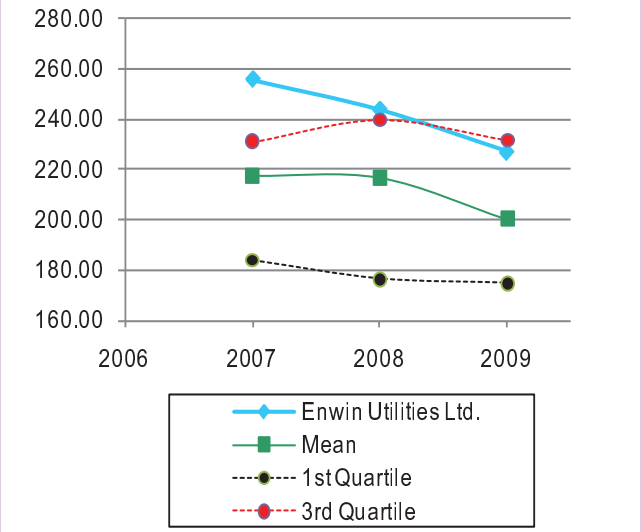


This figure includes both customer and distribution charges.

Your customers were paying around the same amount as most LDC customers in 2007, but are currently paying more than the customers of most of your peers.

6. Efficiency

ER020: Controllable Expense per Customer ($)

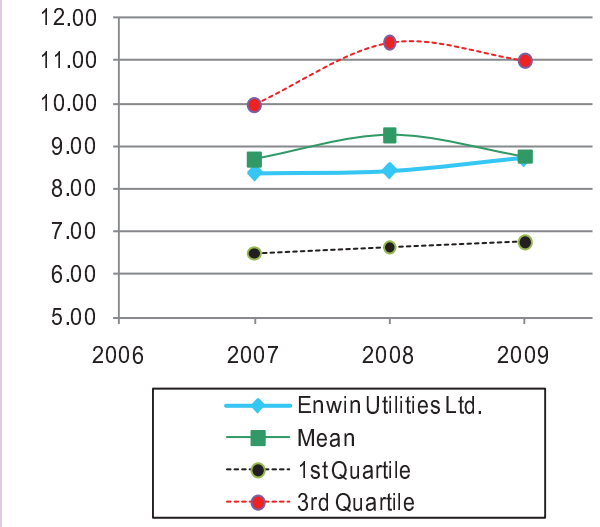


This ratio is defined as:

$$\frac{\text{Controllable Costs}}{\text{Total customers}}$$

This measure provides an indication of the utility's effectiveness in managing controllable costs. Your LDC has higher controllable expenses per customer than most LDCs. This ratio can be influenced by the degree to which a utility provides various customer services. It can also be influenced by the age of the plant.

ER030: Controllable Expense per MWh Sold

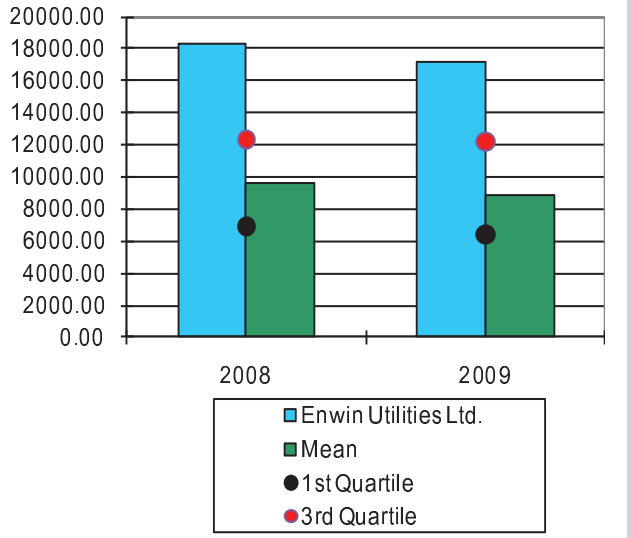


This ratio is defined as:

$$\frac{\text{Controllable Costs}}{\text{Total MWh Billed}}$$

This measure provides an indication of the utility's effectiveness in managing controllable costs. Your LDC has average levels of controllable expenses per MWh billed. As with ER020, this ratio can be influenced by the degree to which a utility provides various customer services. It can also influenced be by the age of the plant.

ER150: Controllable Cost per Circuit km of Line



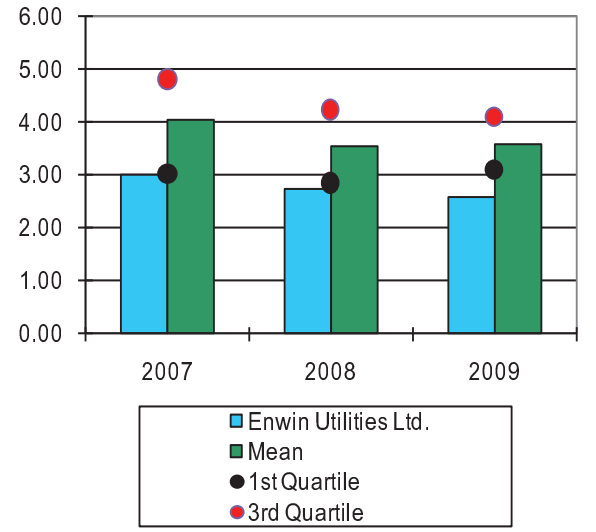
This ratio is defined as:

$$\frac{\text{Controllable Costs}}{\text{Total Circuit km of line}}$$

This measure provides an indication of the utility's effectiveness in managing controllable costs.

Your LDC has a higher ratio of controllable costs per circuit km of line than most LDCs. This ratio may be impacted by customer density and by the age of the plant.

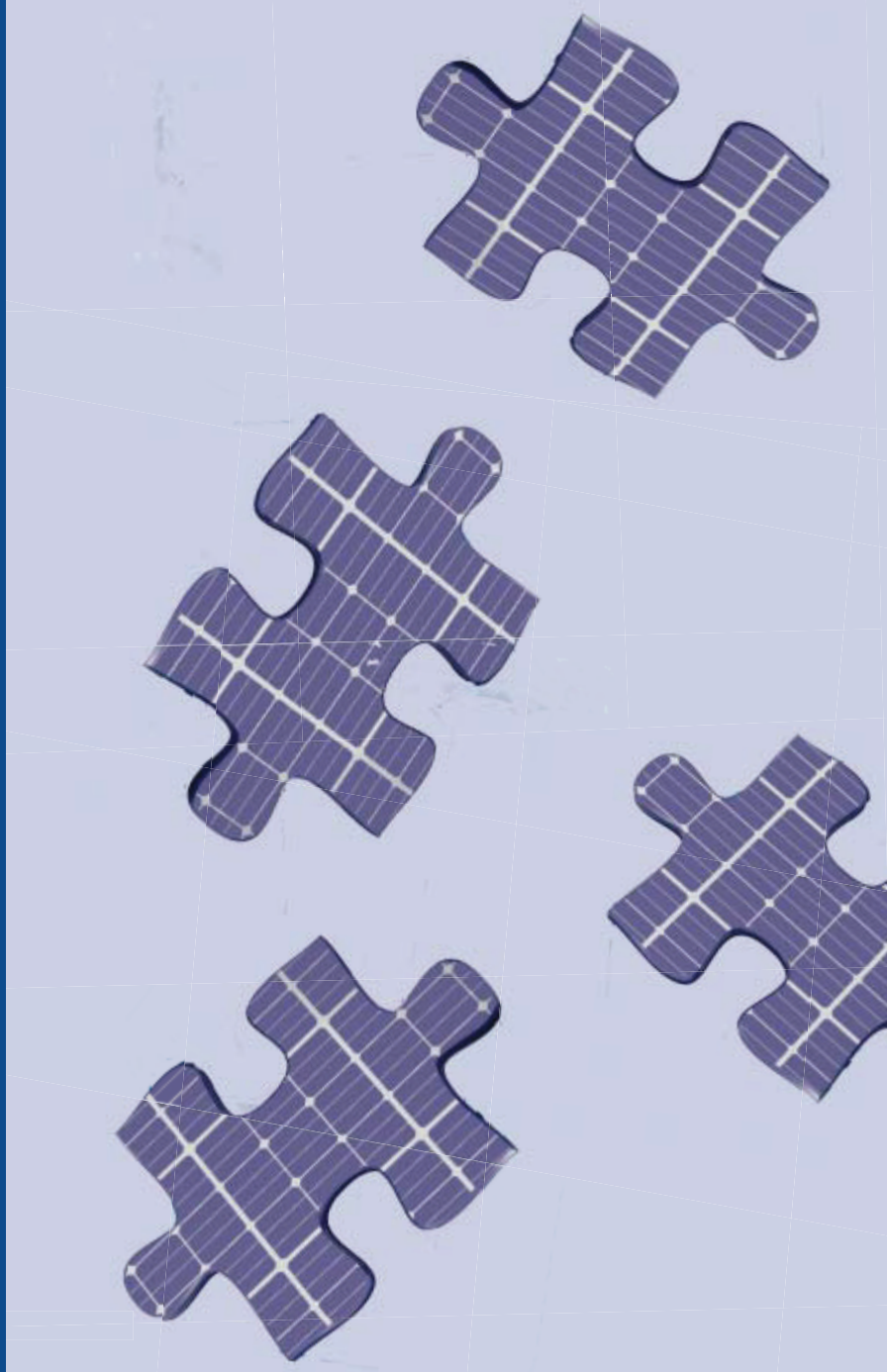
S238: Distribution System Losses (%)



This metric identifies the losses associated with providing electricity from generators to end-users.

Losses can be the result of technical deficiencies or theft of power.

Your LDC is reporting a smaller percent of losses than most of your counterparts.



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UPM Survey

The MEARIE Group

2011 Utility Performance Management Survey

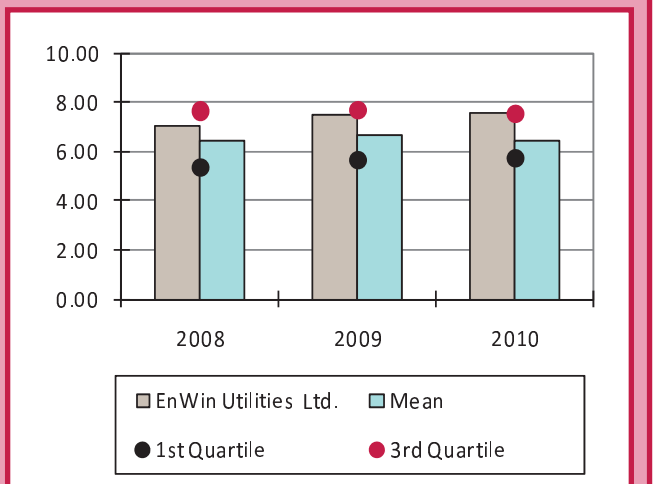
Performance Scorecard ☑

EnWin Utilities Ltd.

UPM Survey

1. Profitability

FR300: Operating Margin (%)

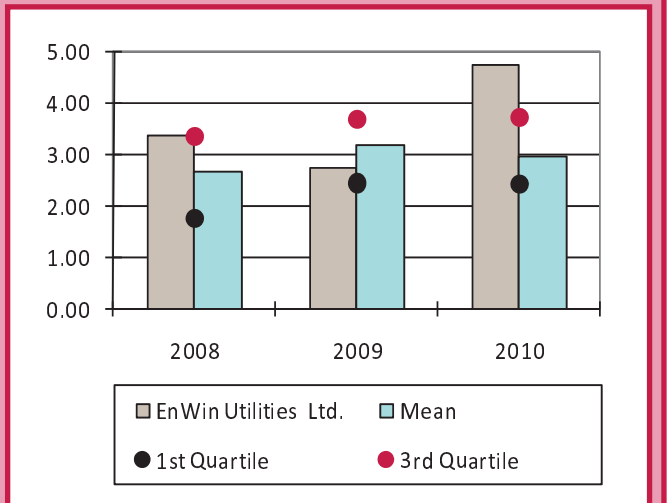


Operating Margin is defined as:

$$\frac{\text{EBIT}}{\text{Total Electricity Revenue}}$$

Operating margin reflects the profitability of the company as influenced by management decisions (interest and taxes are excluded). The higher the operating margin, the more profitable is the company's core business. In 2010, this ratio indicates that your LDC is at the 3rd Quartile and thus better than most survey participants in your effectiveness in managing your costs and contributing to the profitability of your business. This is similar to your result in 2009.

FR310: Net Margin (%)



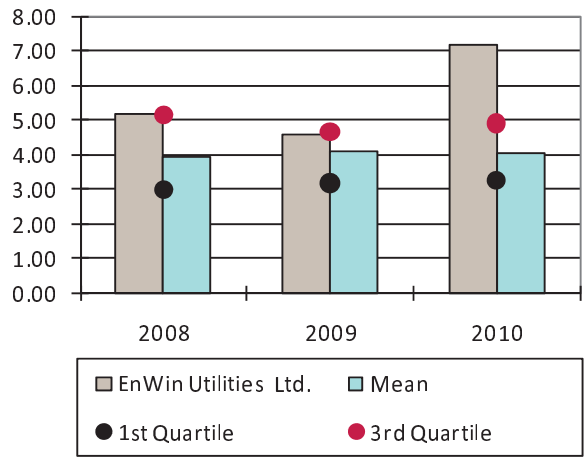
Net Margin is defined as:

$$\frac{\text{Net Income}}{\text{Total Electricity Revenue}}$$

Net margin is a measure of corporate profitability and a good way of comparing companies in the same industry, since such companies are generally subject to similar business conditions. In 2010, your LDC's high net margin indicates that you are generating more than sufficient income to cover financial expenses as well as operating expenses. This is an improvement over 2009.

EnWin Utilities Ltd.
2010 Performance Scorecard

FR290: Return on Capital Employed (%)



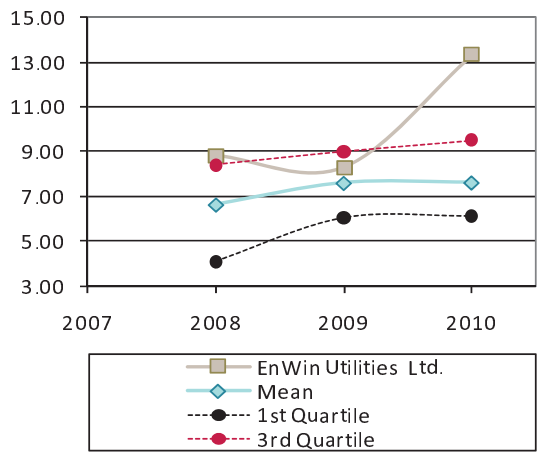
ROCE is defined as:

$$\frac{\text{Net Income}}{\text{Equity + Debt– (Cash+ Short Term Investments)}}$$

This ratio measures profit per dollar of capital employed. It is similar to Return on Assets but takes into account the sources of financing. It is commonly used as a measure for assessing whether a business generates enough returns to pay for its cost of capital.

In 2010, and consistent with 2008 and 2009, your LDC is at the 3rd Quartile and is realizing greater returns from capital employed than most participants.

FR250: Return on Equity (%)



ROE is defined as:

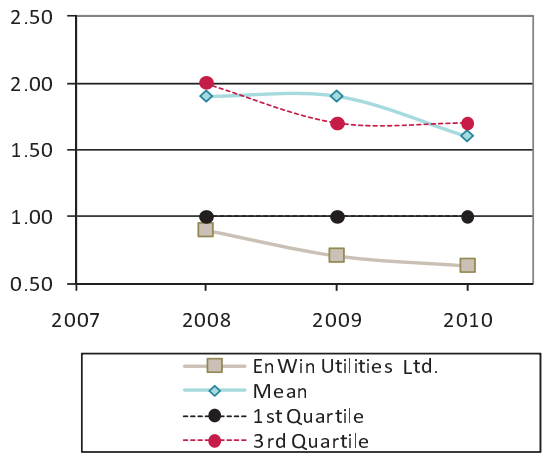
$$\frac{\text{Net Income}}{\text{Total Equity}}$$

(Including share capital and retained earnings)

This ratio measures profit per dollar of equity. With a large increase over the last year in 2010, your LDC is in the 3rd Quartile of participating LDCs, consistent with 2008. This indicates you have a profit per dollar of equity greater than most LDCs participating in the survey.

2. Financial Strength

FR030: Current Ratio

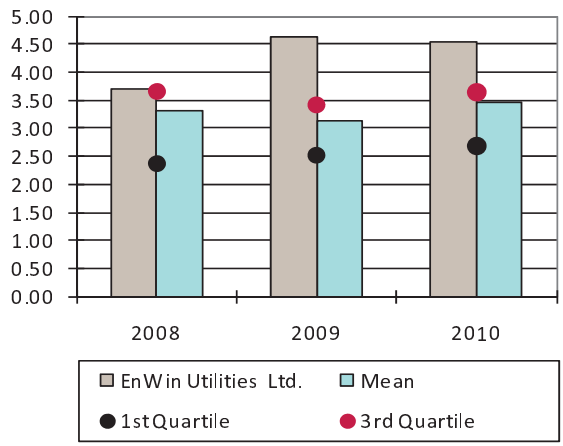


Current ratio is defined as:

$$\frac{\text{Current Assets}}{\text{Current Liabilities}}$$

It is a measure of the utility's liquidity. Consistent with 2009, in 2010, you are below the bottom Quartile for this metric, meaning that you may be less able to meet your short term financial obligations than many of the participants in the survey.
[As a note, when current liabilities exceed current assets (the current ratio is below 1), a company may have problems meeting its short-term obligations.]

FR320: Interest Coverage Ratio



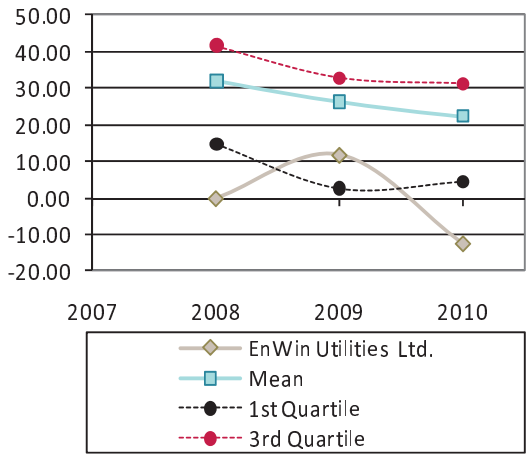
The Interest Coverage Ratio is calculated as:

$$\frac{\text{EBIT}}{\text{Expenses – Financial}}$$

It is a measure of a company's ability to honour its debt payments. As in 2009, in 2010 your LDC has a higher value for this ratio than most survey participants.

EnWin Utilities Ltd.
2010 Performance Scorecard

FR040: Number of Days Cash Reserve

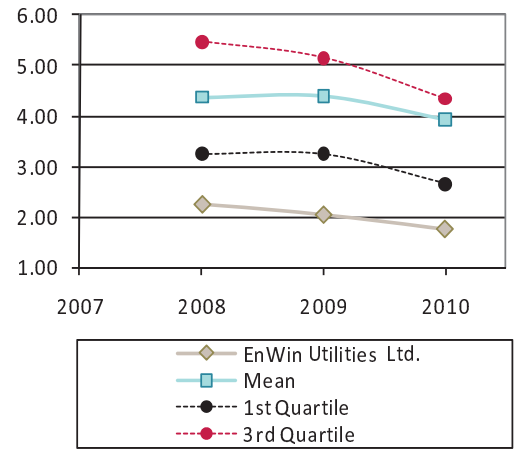


This ratio is defined as:

Cash + Short Term Investments
(Cost of Power, Operations, Maintenance, Admin., Financing charges, and Capital Expenditures) / 365

This ratio measures the utility's ability to meet its short term cash requirements. Your 2010 results indicate that you may want to review your levels of cash and short term investments. Because your number of days reserve is in the 1st Quartile, you may not be as able to meet your short term cash requirements as most of the survey participants.

FR140: Operating Ratio (%)



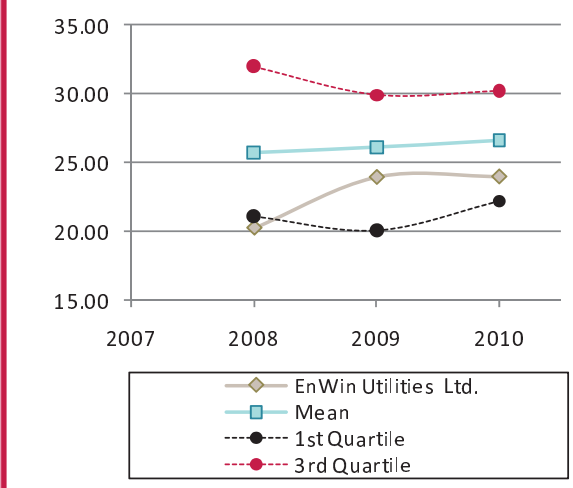
Operating Ratio is defined as

Total O & M Expenses
Total Revenue

This ratio provides an indication of the utility's effectiveness in managing operation and maintenance costs as a percent of its total electricity revenue. Your 2010 results are consistent with 2008 and 2009 and indicate a lower level of O&M costs per revenue than most LDCs Influences include the age of the plant and the amount of plant replacement carried out by the utility.

3. Asset Utilization

FR050: Number of Days Sales Outstanding

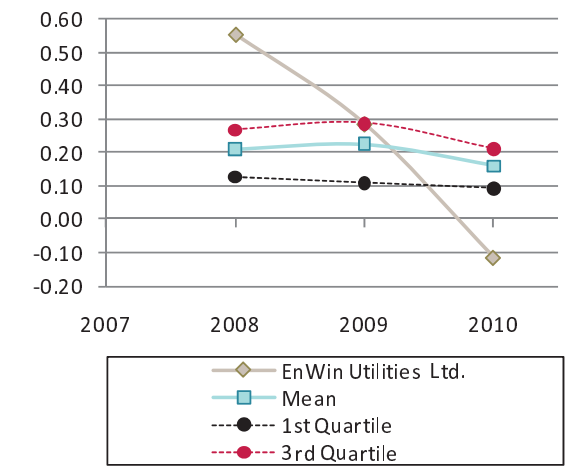


This ratio is defined as:

Accounts Receivable: Electrical Energy at year end
(Total Service Revenue **/ 365**)

This ratio relates to the utility's ability to expedite the collection of its accounts receivable related to the sale of energy. It is influenced by utility collection practices and, together with the ratio Number of Days of Unbilled Revenue, will provide an indication of the utility's ability to manage its major accounts receivable balances.
In 2010, you are below average in this area, reflecting better billing and collections practices than other participants.

FR100: Bad Debt as % of Revenue

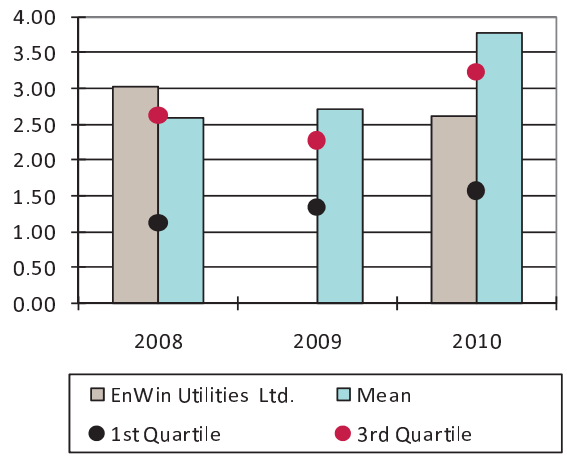


This ratio is defined as:

Bad Debt
Total Revenue

It indicates how effectively a utility is collecting revenue - the lower the percentage, the more effective the utility is at collecting service revenue.
Major variances from year to year may result from economic conditions, or from large customers becoming insolvent.
In 2010, you have dropped below the 1st Quartile for this ratio, meaning that you are more effective in managing bad debt than the average survey participant.

ER140: Inventory Turnover Ratio

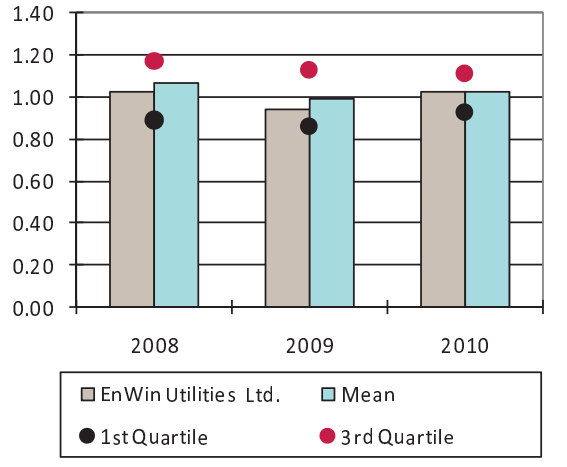


This ratio is defined as:

$$\frac{\text{Full Year of Cost of Materials Used}}{\text{Average Inventory}}$$

This ratio indicates how effectively a utility is managing its inventory. In 2010, your results indicate that you have a rate of inventory turnover during a typical operating cycle that is below the average for LDCs participating in the survey.

ER160: Asset Efficiency



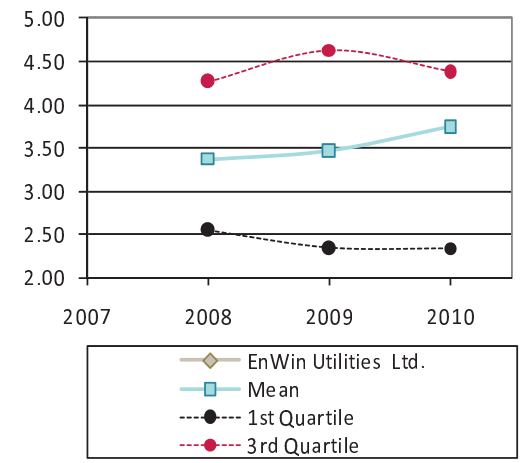
Asset Efficiency is defined as:

$$\frac{\text{Total Electricity Service Revenue}}{\text{Net Assets}}$$

The higher this ratio, the greater the revenue generated from existing assets. In 2010, your LDC is at the average on this measure of efficiency.

4. Employees

MR020: Short Term Absenteeism: Days per FTE



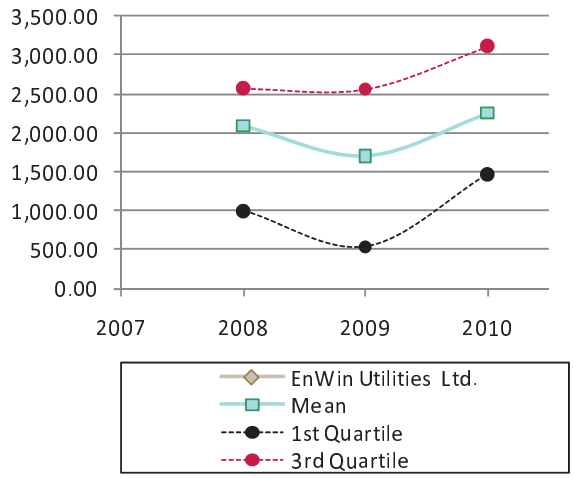
This ratio is defined as:

$$\frac{\text{Number of Short Term Absences}}{\text{Number of FTEs}}$$

This ratio calculates the number of work days lost due to short term absenteeism (5 days or less) per FTE. Absenteeism may be an indicator of employee satisfaction and/or health or safety or environmental conditions at the utility.

You currently do not track this information for 2008 - 2010, but on average survey participants have recorded slightly more short term absences in the last year.

MR070: Staff Development Expenses per FTE



This ratio is defined as:

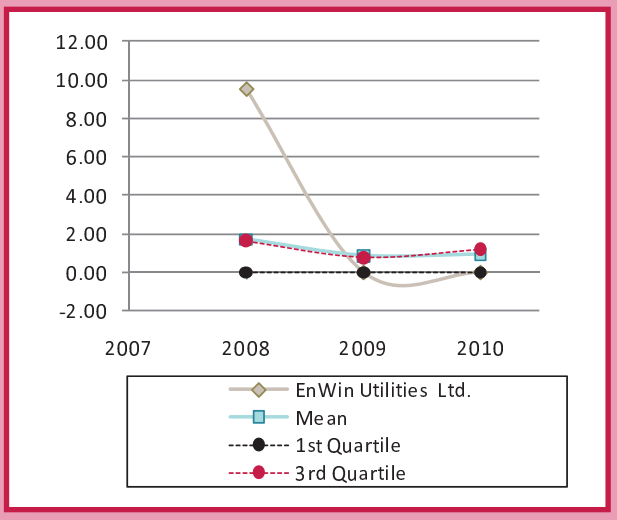
$$\frac{\text{Total Costs of Staff Development}}{\text{Number of FTEs}}$$

This ratio indicates the average cost spent per employee on staff development.

You currently do not track this information, but in 2010 the other survey participants have increased spending in the area of staff development over the last year.

EnWin Utilities Ltd.
2010 Performance Scorecard

MR040: Accidents: Frequency per 200,000 hours



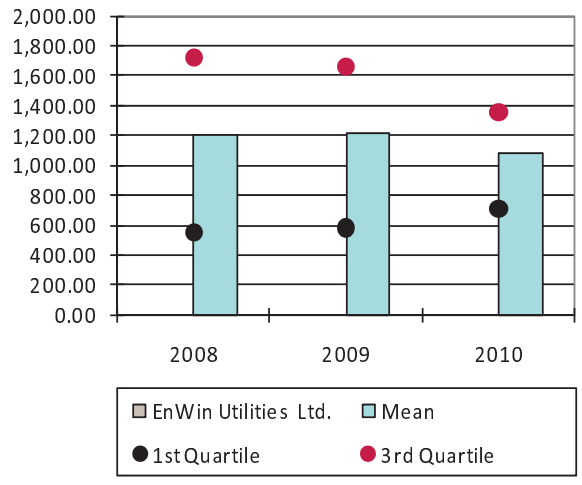
This ratio is defined as:

Number of Compensable Injuries **x 200,000**
Number of Employee Hours Worked

It demonstrates the trend in frequency of on-the-job accidents. Only injuries where compensation is paid are included in this figure. A high accident frequency may indicate that more safety training is needed.

In comparison to your peers, compensable injuries have been less frequent at your location over 2009 and 2010 – an improvement over 2008.

MR090: Cost of Safety Training per FTE



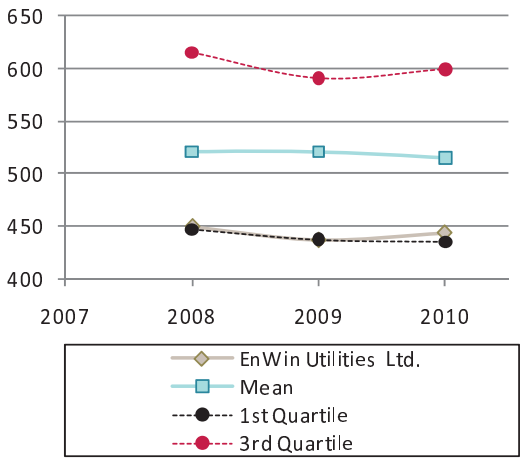
This ratio is defined as:

Cost of Training on Safe Work Practices
Number of FTEs

This ratio indicates the average cost spent per employee on safety training. It can be looked at in conjunction with MR040: Accidents: Frequency per 200,000 hours. You currently do not track this information, but in 2010 and on average the other survey participants have decreased spending in the area of safety training over the last year.

EnWin Utilities Ltd.
2010 Performance Scorecard

S16: Number of Customers Per FTE

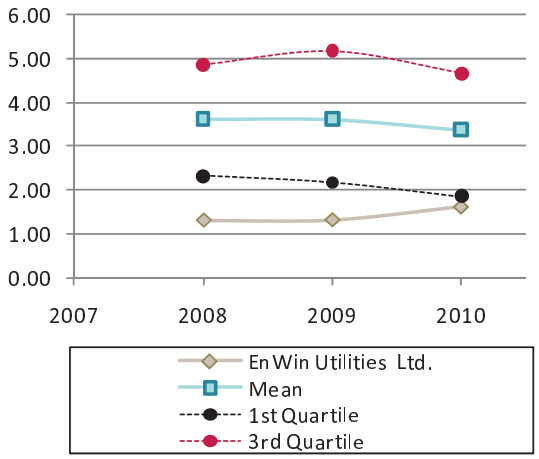


This ratio is defined as:

$$\frac{\text{Total Customers}}{\text{Total FTEs}}$$

This ratio is a traditional indicator of corporate performance; the greater the number of customers per employee, generally the more productive and efficient the organization. Consistent with 2008 and 2009 your 2010 results indicate a lower than average ratio.
This ratio should not however be looked at in isolation. A high number could indicate industry growth if the total number of customers has increased year over year.

MR030: Overtime Hours as a % of Regular Hours



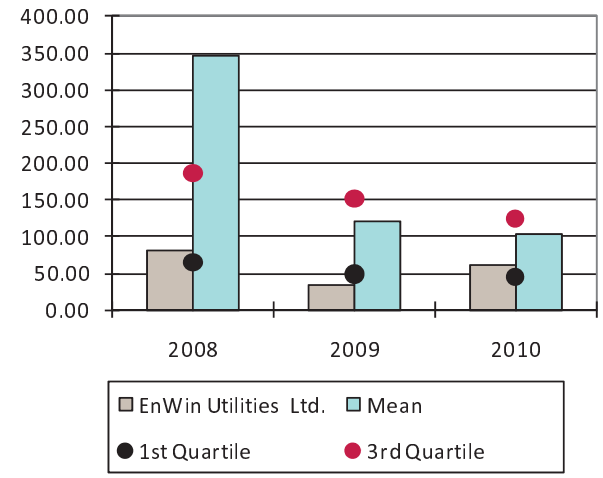
This ratio is defined as:

$$\frac{\text{Overtime Hours Worked}}{\text{Total Regular Hours}}$$

In 2010, and consistent with 2008 and 2009 you have been in the 1st Quartile and your employees have worked less overtime as compared with other survey participants over the last three years. This measure provides an indication of how utilities manage their workload.

5. Customers

SR180: Total Outage Minutes per Customer

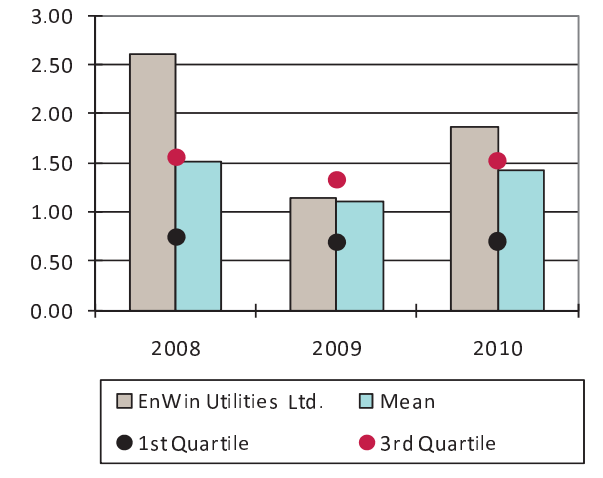


This ratio is defined as:

$$\frac{\text{Customer minutes of Interruption}}{\text{Number of Customers}}$$

This ratio takes into account total outage minutes per customer, including those caused by supply (Code 2). A higher ratio can be caused by such things as severe weather or by lack of adequate responsiveness on the part of the LDC.
As in 2008 and 2009 your utility is in the 1st Quartile in 2010, and you had a smaller number of outage minutes per customer than most survey participants.

SR090: SAIFI: LDC Distribution System



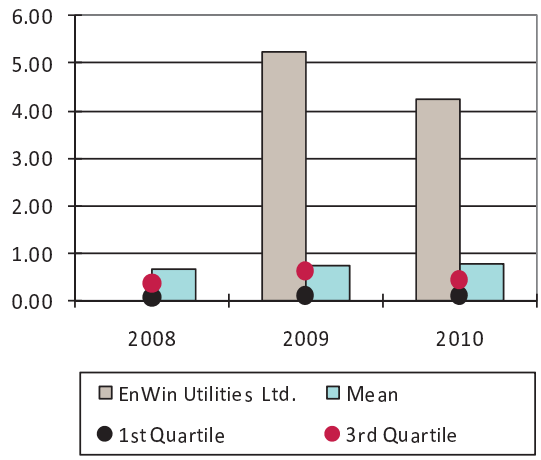
SAIFI is defined as:

$$\frac{\text{Total Number of Customer Interruptions}}{\text{Total Number of Customers}}$$

SAIFI is commonly used as a reliability indicator because it calculates the average number of interruptions that a customer would experience in a year. It is measured in units of interruptions per customer and it looks at the interruptions caused by the distribution system only. According to IEEE Standard 1366, the median value for North American utilities is approximately 1.10 interruptions per customer.
Your results in 2010 indicate that your customers are experiencing more interruptions than the customers of most survey participants.

EnWin Utilities Ltd.
2010 Performance Scorecard

CR100: Percent of Bills Cancelled and Re-issued

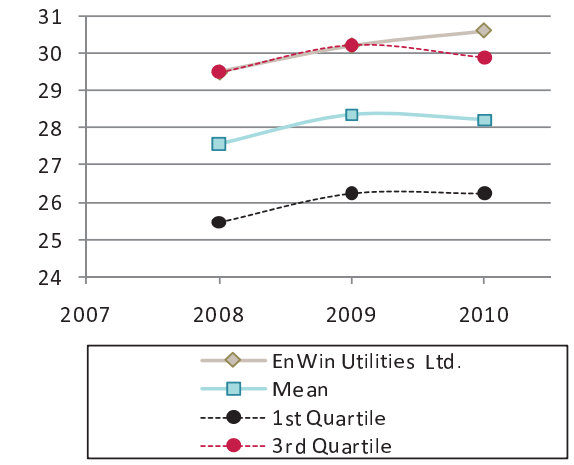


The calculation for this ratio is:

$$\frac{\text{Number of bills cancelled \& reissued}}{\text{Total number of bills issued}}$$

In both 2009, and 2010, you have a significantly higher rate of bill cancellation and re-issue than the average survey participant. Although this may reflect errors in bill preparation that should be reviewed, there may have been other extenuating circumstances created by customers and due to local economic conditions.

S172: Monthly Bill for 1000kWh Residential Customers

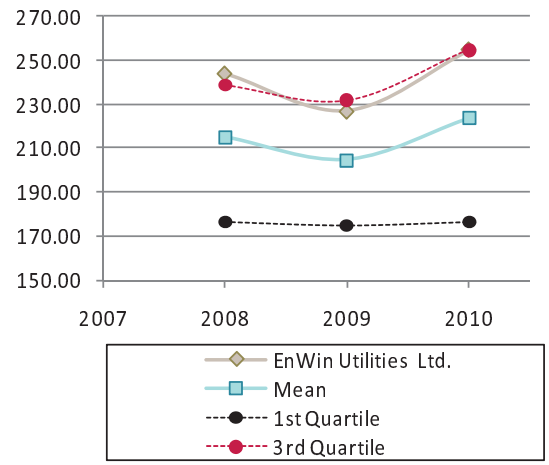


This figure includes both customer and distribution charges.

Over 2008 through 2010 you have been in the upper Quartile of survey participants, and your customers are paying higher bills per month than those of the average LDC participant.

6. Efficiency

ER020: Controllable Expense per Customer ($)

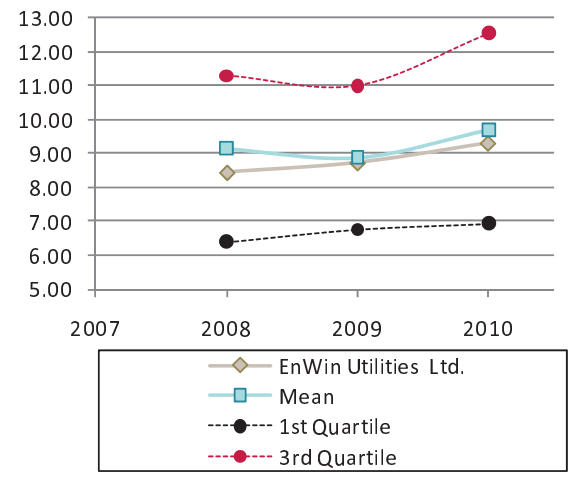


This ratio is defined as:

$$\frac{\text{Controllable Costs}}{\text{Total customers}}$$

This measure provides an indication of the utility's effectiveness in managing controllable costs. Consistent with 2008 and 2009, in 2010 your LDC has higher controllable expenses per customer than most LDCs. This ratio can be influenced by the degree to which a utility provides various customer services. It can also be influenced by the age of the plant.

ER030: Controllable Expense per MWh Sold ($)

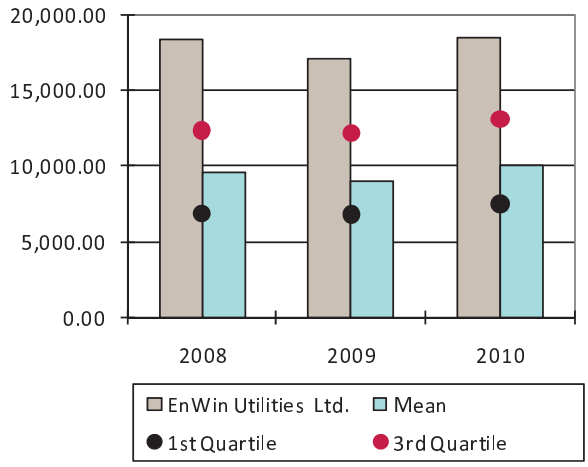


This ratio is defined as:

$$\frac{\text{Controllable Costs}}{\text{Total MWh Billed}}$$

This measure provides another indication of the utility's effectiveness in managing controllable costs. Consistent with 2008 and 2009, in 2010 your LDC has average levels of controllable expenses per MWh billed. As with ER020, this ratio can be influenced by customer density as well as the degree to which a utility provides various customer services. It can also be influenced by the age of the plant.

ER150: Controllable Cost per Circuit km of Line

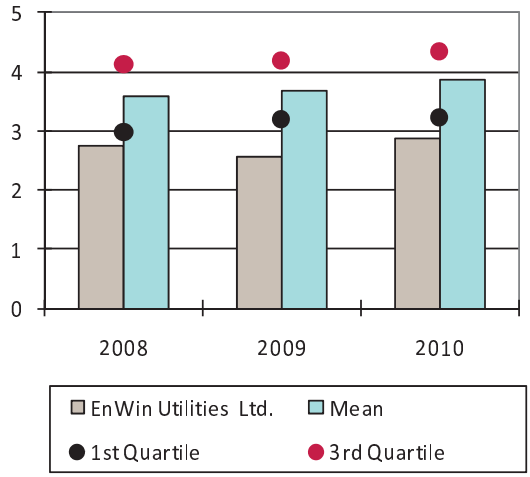


This ratio is defined as:

$$\frac{\text{Controllable Costs}}{\text{Total Circuit km of line}}$$

This measure provides an indication of the utility's effectiveness in managing controllable costs. For the period 2008 through 2010, your LDC has a higher ratio of controllable costs per circuit km of line than most survey participants. This ratio may be impacted by customer density and by the age of the plant.

S238: Distribution System Losses (%)



This metric identifies the losses associated with providing electricity from generators to end-users.

Losses can be the result of technical deficiencies or theft of power.

As in 2008 and 2009, in 2010 your LDC is reporting a smaller percent of losses than most of your counterparts.

2011 Utility Performance Management Survey

UPM Survey

The MEARIE Group

3700 Steeles Avenue West, Suite 1100
Vaughan, Ontario L4L 8K8
905.265.5300
1.800.668.9979
www.mearie.ca

25 years
The MEARIE Group

2012 Utility Performance Management Survey

Performance Scorecard ☑

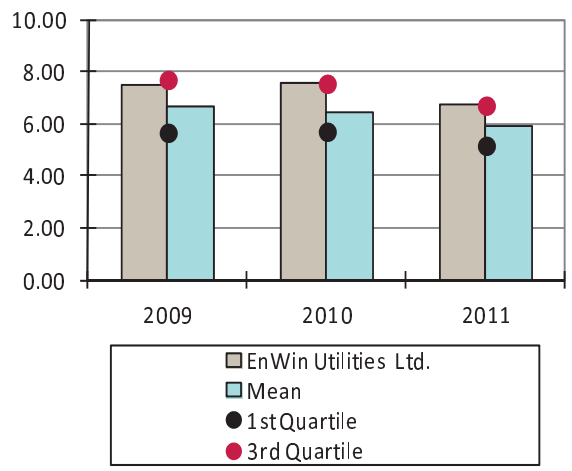
ENWIN Utilities Ltd.

UPM Survey

EnWin Utilities Ltd.
2011 Performance Scorecard

1. Profitability

FR300: Operating Margin (%)

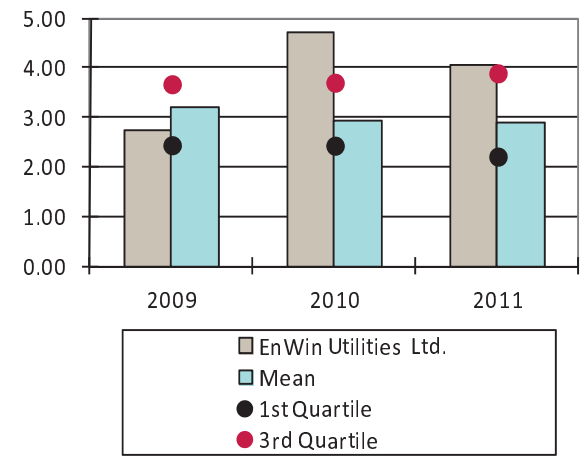


Operating Margin is defined as:

$$\frac{\text{EBIT}}{\text{Total Electricity Revenue}}$$

Operating margin reflects the profitability of the company as influenced by management decisions (interest and taxes are excluded). The higher the operating margin, the more profitable is the company's core business. In 2011, this ratio indicates that your LDC is more effective than most participants at managing your costs and contributing to the profitability of your business.

FR310: Net Margin (%)

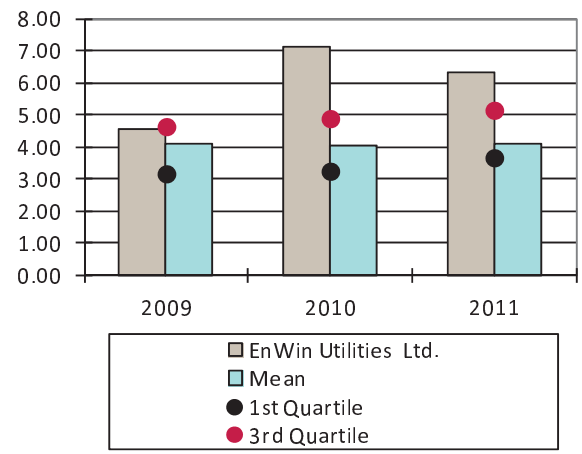


Net Margin is defined as:

$$\frac{\text{Net Income}}{\text{Total Electricity Revenue}}$$

Net margin is a measure of corporate profitability and a good way of comparing companies in the same industry, since such companies are generally subject to similar business conditions. Although your LDC had a low period in 2009, in 2010 and 2011 you were generating more than sufficient income to cover financial expenses as well as operating expenses.

FR290: Return on Capital Employed (%)

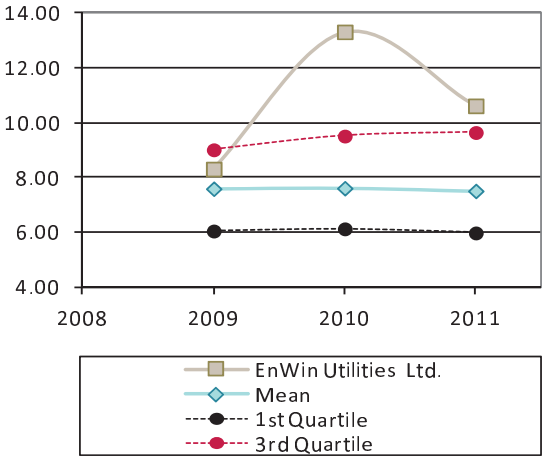


ROCE is defined as:

$$\frac{\text{Net Income}}{\text{Equity + Debt– (Cash+ Short Term Investments)}}$$

This ratio measures profit per dollar of capital employed. It is similar to Return on Assets but takes into account the sources of financing. It is commonly used as a measure for assessing whether a business generates enough returns to pay for its cost of capital. In 2011, your utility continues to realize greater returns from capital employed than most participants.

FR250: Return on Equity (%)



ROE is defined as:

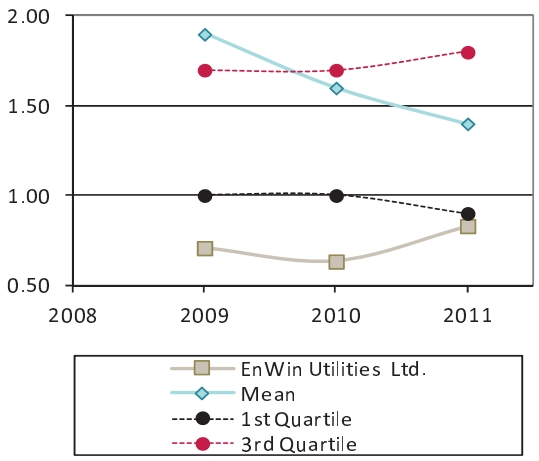
$$\frac{\text{Net Income}}{\text{Total Equity}}$$

(Including share capital and retained earnings)

This ratio measures profit per dollar of equity. Your LDC was in line with the average with respect to ROE in 2009 and in the third quartile in 2010 and 2011. Once again your results are better than most participants for this ratio.

2. Financial Strength

FR030: Current Ratio



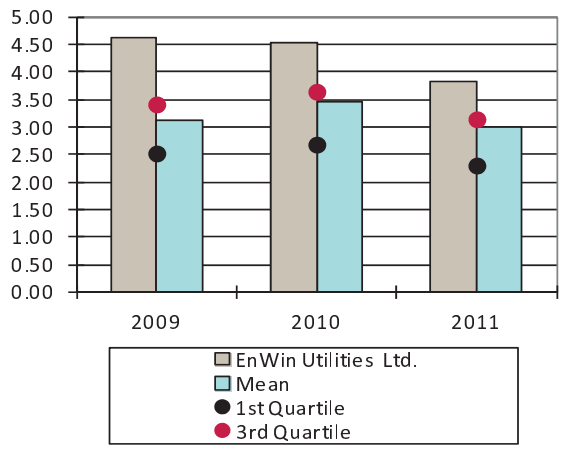
Current ratio is defined as:

$$\frac{\text{Current Assets}}{\text{Current Liabilities}}$$

It is a measure of the utility's liquidity. In 2009, 2010 and 2011 your results are consistently in the 1st quartile for this metric. There is a risk you may be less able to meet your short term financial obligations than many of the participants.

It should be noted that when current liabilities exceed current assets (the current ratio is below 1), a company may have problems meeting its short-term obligations.

FR320: Interest Coverage Ratio

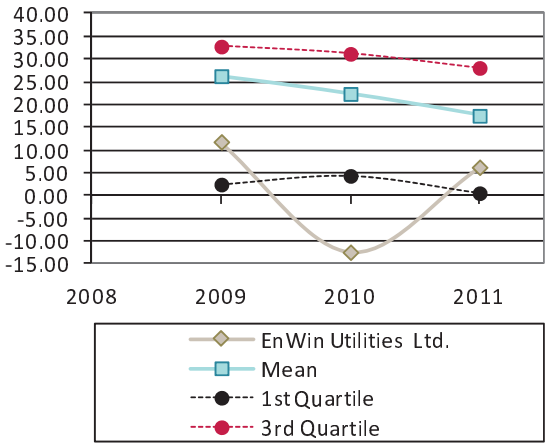


The Interest Coverage Ratio is calculated as:

$$\frac{\text{EBIT}}{\text{Expenses – Financial}}$$

It is a measure of a company's ability to honour its debt payments. In 2011, consistent over the period, your LDC has a higher value for this ratio than most of the survey's participants.

FR040: Number of Days Cash Reserve



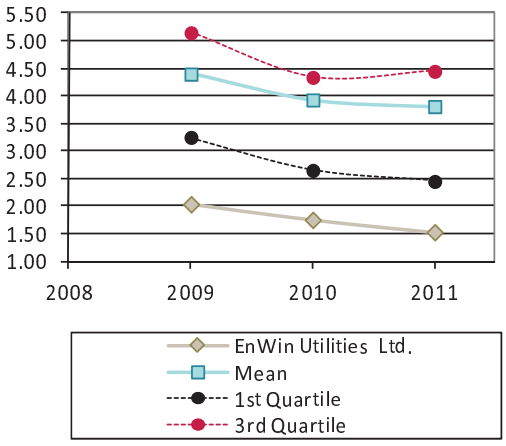
This ratio is defined as:

Cash + Short Term Investments
(Cost of Power, Operations, Maintenance, Admin., Financing charges, and Capital Expenditures) / 365

This ratio measures the utility's ability to meet its short term cash requirements. Your 2011 results are higher than 2010, however, you may want to assess the risk associated with your levels of cash and short term investments.

Because your number of days reserve is lower than the mean, you may not be as able to meet your short term cash requirements as the average survey participant.

FR140: Operating Ratio (%)



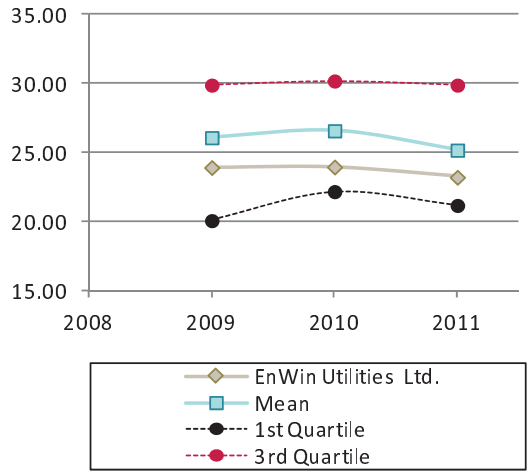
Operating Ratio is defined as

Total O & M Expenses
Total Revenue

This ratio provides an indication of the utility's effectiveness in managing operation and maintenance costs as a percent of its total electricity revenue. Consistent with previous years in the period, 2011 results indicate a lower level of O&M costs per unit of revenue than most participants. Influences include the age of the plant and the amount of plant replacement carried out by the utility.

3. Asset Utilization

FR050: Number of Days Sales Outstanding

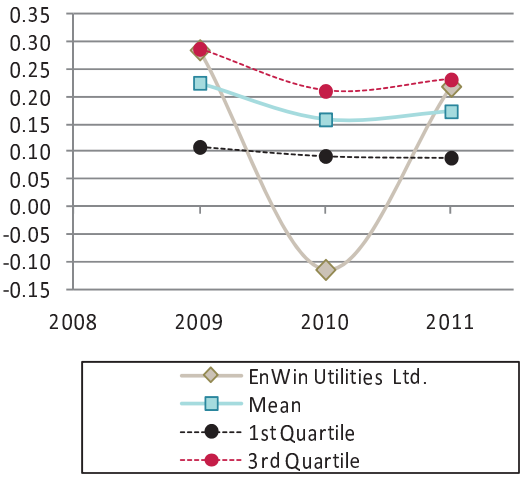


This ratio is defined as:

Accounts Receivable: Electrical Energy at year end
(Total Service Revenue **/ 365**)

This ratio relates to the utility's ability to expedite the collection of its accounts receivable related to the sale of energy. It is influenced by utility collection practices and, together with the ratio Number of Days of Unbilled Revenue (FR070), will provide an indication of the utility's ability to manage its major accounts receivable balances. Again in 2011, you are below average in this area, reflecting better billing and collections practices than other participating utilities.

FR100: Bad Debt as % of Revenue

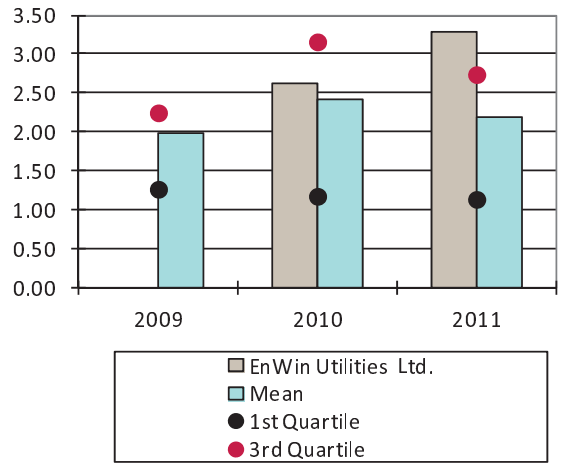


This ratio is defined as:

Bad Debt
Total Revenue

It indicates how effectively a utility is collecting revenue - the lower the percentage, the more effective the utility is at collecting service revenue. Major variances from year to year may result from economic conditions, or from large customers becoming insolvent.
You are near the 3rd quartile in 2011 for this ratio, meaning that there may be increased risk associated with bad debt management.

ER140: Inventory Turnover Ratio

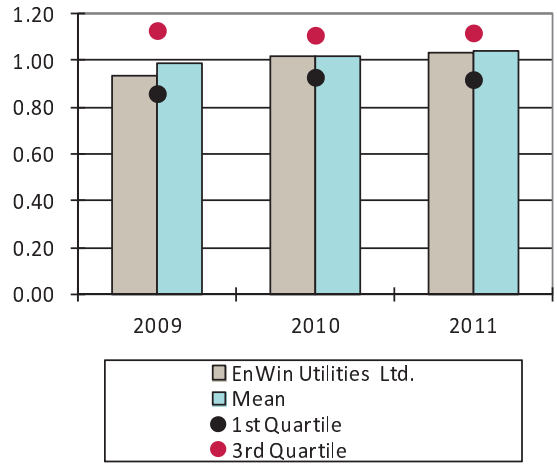


This ratio is defined as:

$$\frac{\text{Full Year of Cost of Materials Used}}{\text{Average Inventory}}$$

This ratio indicates how effectively a utility is managing its inventory. In 2010 and 2011, the rate of inventory turnover during a typical operating cycle has been relatively high – above average and in the 3rd Quartile. High inventory turnover can be influenced by not having enough inventory on hand or buying in too small a quantity to sustain normal operations.

ER160: Asset Efficiency



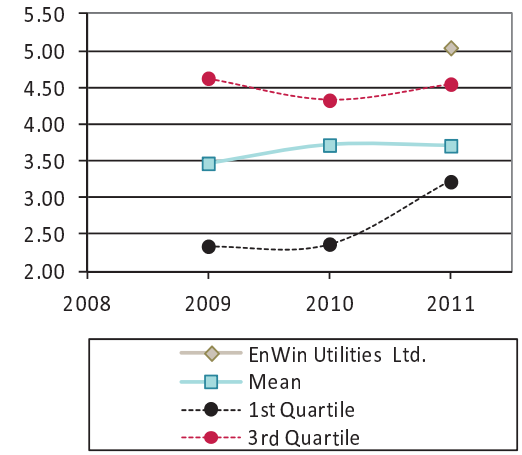
Asset Efficiency is defined as:

$$\frac{\text{Total Electricity Service Revenue}}{\text{Net Assets}}$$

The higher this ratio, the greater the revenue generated from existing assets. A lower ratio indicates a less effective use of assets to generate revenue. In 2011, your ratio is at the average for this measure of efficiency similar to previous years.

4. Employees

MR020: Short Term Absenteeism: Days per FTE

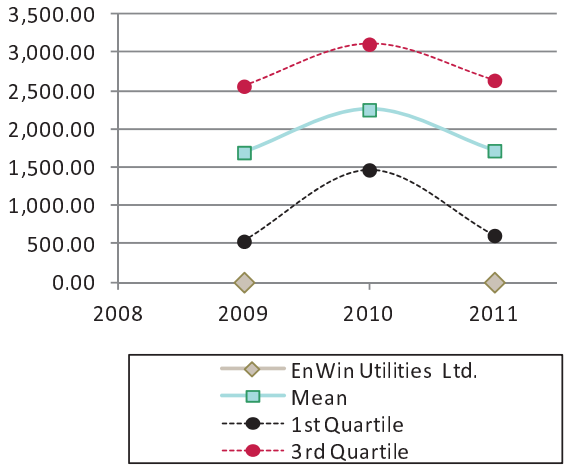


This ratio is defined as:

$$\frac{\text{Number of Short Term Absences}}{\text{Number of FTEs}}$$

This ratio calculates the number of work days lost due to short term absenteeism (5 days or less) per FTE. Absenteeism may be an indicator of employee satisfaction and/or health or safety or environmental conditions at the utility. You did not track this metric in 2009 and 2010, but in 2011 your employees took more short term absences than the average LDC employee.

MR070: Staff Development Expenses per FTE



This ratio is defined as:

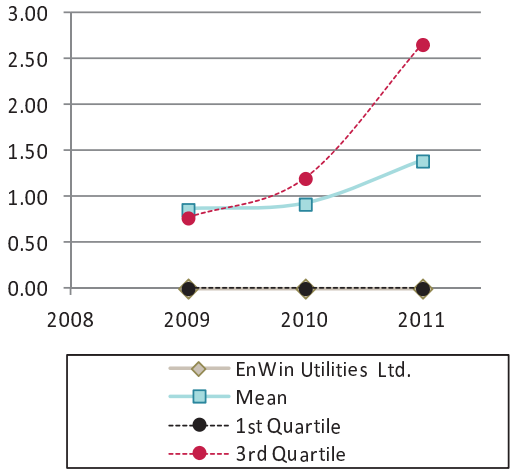
$$\frac{\text{Total Costs of Staff Development}}{\text{Number of FTEs}}$$

This ratio indicates the average cost spent per employee on staff development.

You spent nothing on staff development in 2009 and 2011. Participants in general increased their spending in this area in 2010.

EnWin Utilities Ltd.
2011 Performance Scorecard

MR040: Accidents: Frequency per 200,000 hours

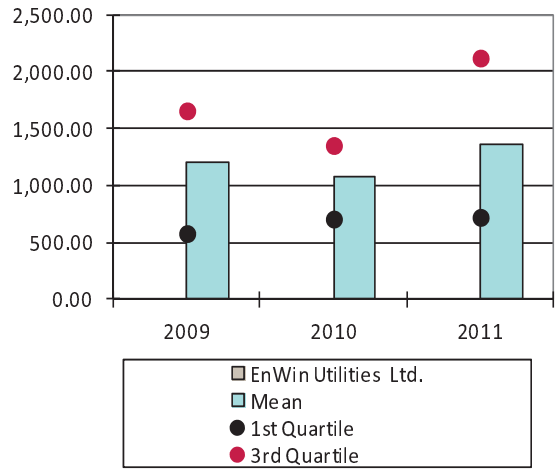


This ratio is defined as:

$$\frac{\text{Number of Compensable Injuries}}{\text{Number of Employee Hours Worked}} \times 200{,}000$$

It demonstrates the trend in frequency of on-the-job accidents. Only injuries where compensation is paid are included in this figure. A high accident frequency may indicate that more safety training is needed. In comparison to your peers, in 2011 compensable injuries were less frequent at your location. You have had no accidents since 2009 and are in the 1st quartile.

MR090: Cost of Safety Training per FTE



This ratio is defined as:

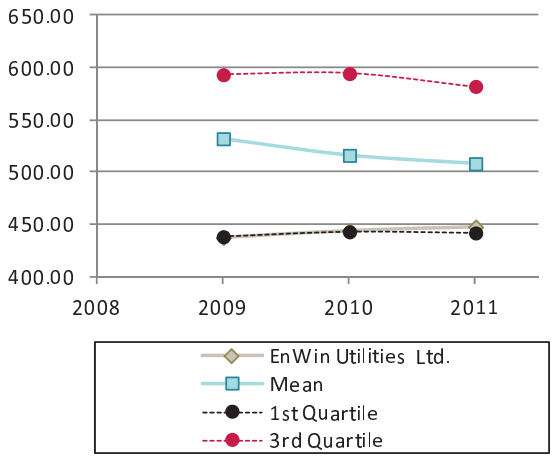
$$\frac{\text{Cost of Training on Safe Work Practices}}{\text{Number of FTEs}}$$

This ratio indicates the average cost spent per employee on safety training. It can be looked at in conjunction with MR040: Accidents: Frequency per 200,000 hours.

Although you do not track this metric, spending in this area decreased on average in 2010 and hit a three-year high in 2011.

EnWin Utilities Ltd.
2011 Performance Scorecard

S16: Number of Customers Per FTE

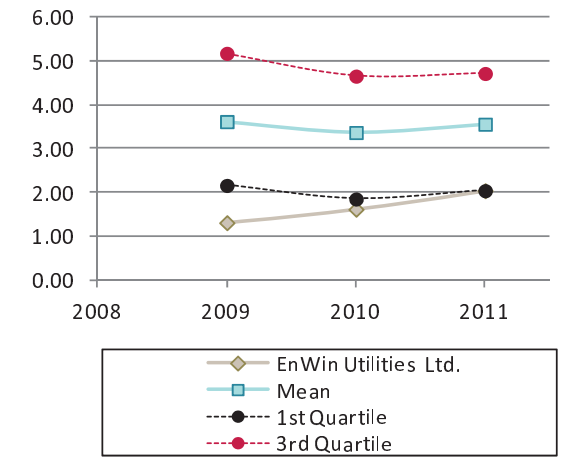


This ratio is defined as:

$$\frac{\text{Total Customers}}{\text{Total FTEs}}$$

This ratio is a traditional indicator of corporate performance; the greater the number of customers per employee, generally the more productive and efficient the organization. Your results are consistently at the 1st quartile for the period 2009 to 2011. This ratio should not be looked at in isolation. The number could reflect a decline in the total number of customers year over year. However, a decrease in customers per FTE alone should merit further investigation.

MR030: Overtime Hours as a % of Regular Hours



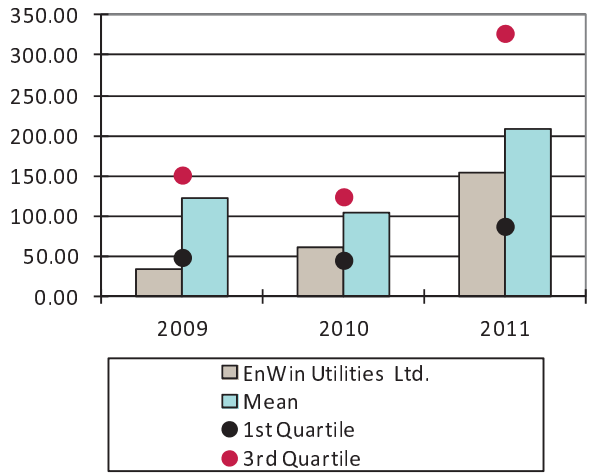
This ratio is defined as:

$$\frac{\text{Overtime Hours Worked}}{\text{Total Regular Hours}}$$

Although this ratio has increased slightly in 2011, your employees are consistently working less overtime compared with other participants. This measure provides an indication of how utilities manage their workload. It can be looked at with S16: Number of Customers per FTE. High values for both ratios could indicate that the LDC is understaffed.

5. Customers

SR180: Total Outage Minutes per Customer



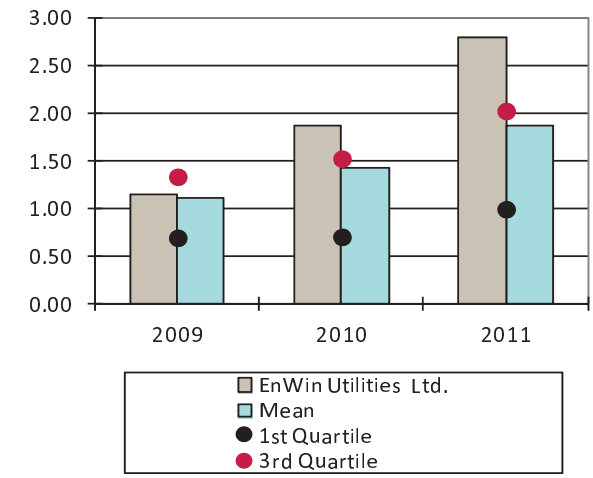
This ratio is defined as:

$$\frac{\text{Customer minutes of Interruption}}{\text{Number of Customers}}$$

This ratio takes into account total outage minutes per customer, including those caused by supply (Code 2). A higher ratio can be caused by such things as severe weather or by lack of adequate responsiveness on the part of the LDC.

Although increasing in 2011, you are still below average and have a smaller number of outage minutes per customer than many participants.

SR090: SAIFI: LDC Distribution System



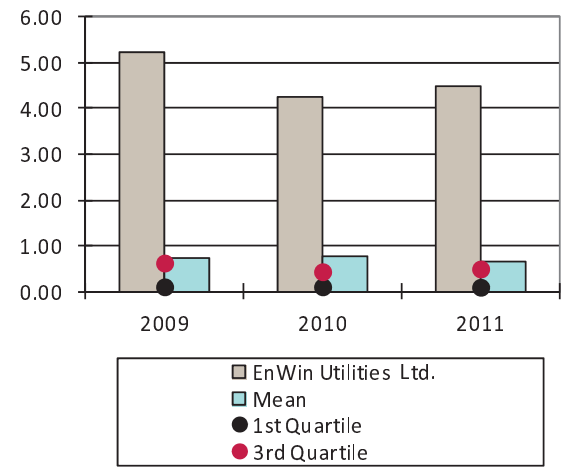
SAIFI is defined as:

$$\frac{\text{Total Number of Customer Interruptions}}{\text{Total Number of Customers}}$$

SAIFI is commonly used as a reliability indicator because it calculates the average number of interruptions that a customer would experience in a year. It is measured in units of interruptions per customer and it looks at the interruptions caused by the distribution system only. According to IEEE Standard 1366, the median value for North American utilities is approximately 1.10 interruptions per customer. Your 2011 results remain in the 3rd quartile similar to 2010. Your customers are experiencing more interruptions than the customers of most participants.

EnWin Utilities Ltd.
2011 Performance Scorecard

CR100: Percent of Bills Cancelled and Re-issued

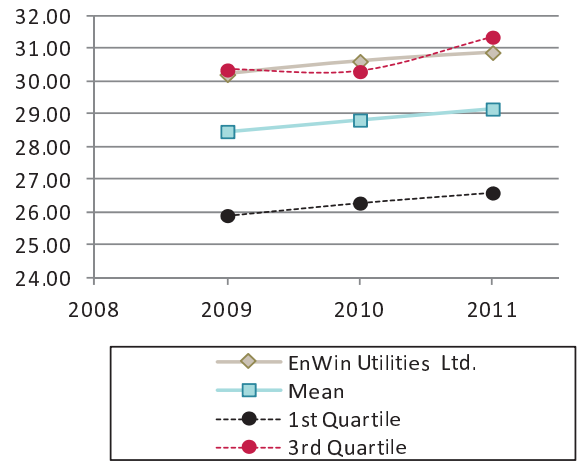


The calculation for this ratio is:

$$\frac{\text{Number of bills cancelled \& reissued}}{\text{Total number of bills issued}}$$

In 2011, you are in the third quartile with regards to rate of bill cancellation and re-issue. There is a risk with respect to billing and collection processes that may need to be addressed.

S172: Monthly Bill for 1000kWh Residential Customers

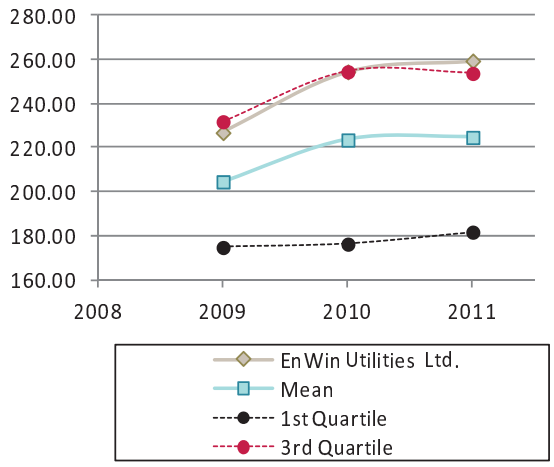


This figure includes both customer and distribution charges.

In 2011, you are at the 3rd quartile and consistent with previous years. Your customers are paying more per month than those of most participating utilities.

6. Efficiency

ER020: Controllable Expense per Customer ($)

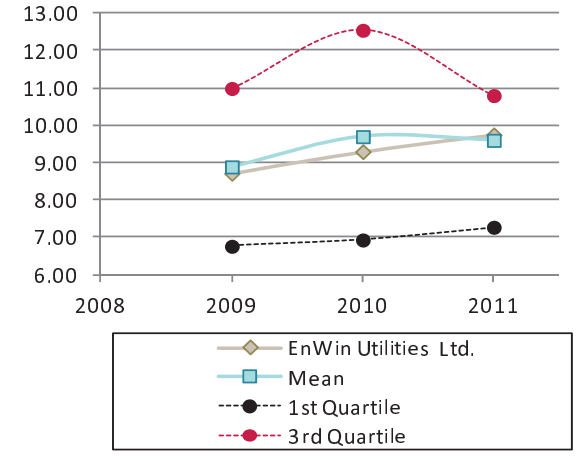


This ratio is defined as:

$$\frac{\text{Controllable Costs}}{\text{Total customers}}$$

This measure provides an indication of the utility's effectiveness in managing controllable costs. Your LDC has higher controllable expenses per customer than most participants in 2011 which is consistent over the period. This ratio can be influenced by customer density as well as the degree to which a utility provides various customer services. It can also be influenced by the age of the plant.

ER030: Controllable Expense per MWh Sold ($)



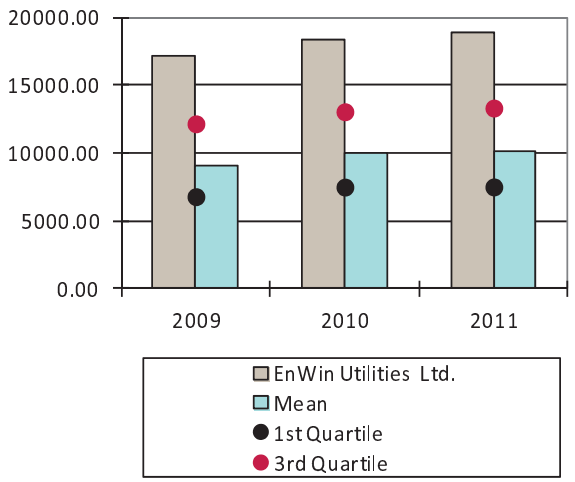
This ratio is defined as:

$$\frac{\text{Controllable Costs}}{\text{Total MWh Billed}}$$

This measure provides an indication of the utility's effectiveness in managing controllable costs. Your LDC has average levels of controllable expenses per MWh billed in 2011, again consistent over the period.
As with ER020, this ratio can be influenced by customer density as well as the degree to which a utility provides various customer services. It can also be influenced by the age of the plant.

EnWin Utilities Ltd.
2011 Performance Scorecard

ER150: Controllable Cost per Circuit km of Line

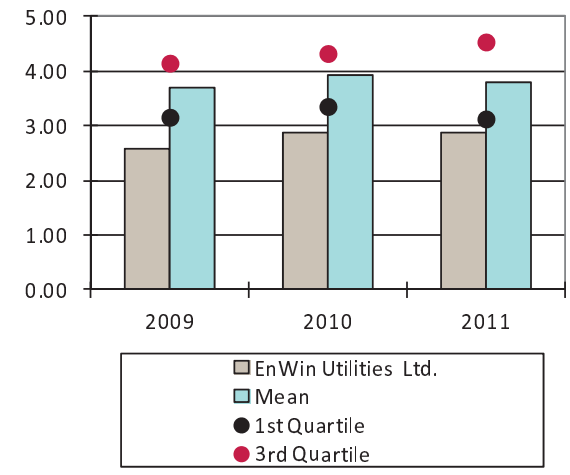


This ratio is defined as:

$$\frac{\text{Controllable Costs}}{\text{Total Circuit km of line}}$$

This measure provides an indication of the utility's effectiveness in managing controllable costs. In 2011, your LDC has a higher ratio of controllable costs per circuit km of line than the average participating utility. This ratio may be impacted by customer density and by the age of the plant.

S238: Distribution System Losses (%)



This metric identifies the losses associated with providing electricity from generators to end-users.

Losses can be the result of technical deficiencies or theft of power.

In 2011 and consistent over the period, your LDC is reporting a smaller percent of losses than most of the survey participants.

2012 Utility Performance Management Survey

UPM Survey

25 years
The MEARIE Group

3700 Steeles Avenue West, Suite 1100
Vaughan, Ontario L4L8K8
905.265.5300
1.800.668.9979
www.mearie.ca

34 King Street East, Suite 600
Toronto, Ontario, M5C 2X8
elenchus.ca

EnWin Utilities Scorecard Final 2016 Report

A Report Prepared by
Elenchus Research Associates Inc.

06/10/2016

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1 BACKGROUND

Elenchus has incorporated full current set of Scorecards as published on the OEB website into this report. All LDCs are named on all tables in this report.

This has enabled us to add the following metrics:

- First Contact Resolution
- Customer Satisfaction Survey Results
- Level of Public Awareness
- Level of Compliance with Ontario Regulation 22/04
- Distribution System Plan Implementation Progress
- Net Cumulative Energy Savings
- Renewable Generation Connection Impact Assessments Completed On Time
- Profitability (Deemed)
- Return on Equity (Achieved)

This report focusses on ranking of metrics which are measured quantitatively. In the case of Level of Compliance with Ontario Regulation 22/04 and Distribution System Plan Implementation Progress, a majority of LDCs responded in a manner other than a completion percentage. To address this, the LDCs are grouped based on the manner of their response. To a much lesser extent, this was also true of First Contact Resolution and Customer Satisfaction Survey Results. In those cases, because quantitative data was reported by most LDCs, the tables are based on quantitative ranking and omit the minority of LDCs that did not report in that manner.

The comparison groupings are the same ones as in the prior report, issued in August. Size, defined as customer count was the metric used for grouping.

The metrics compared in the prior reports are restated in this report in order to capture the full set of LDCs and update for the final public information. As a result, this report supersedes previous reports for the following metrics:

- New Residences Connected on Time
- Scheduled Appointments Met On Time
- Telephone Calls Answered On Time
- Billing Accuracy
- Average Number of Hours that Power to a Customer is Interrupted
- Average Number Times that Power to a Customer is Interrupted
- The PEG Efficiency Assessment
- Total Cost per Customer
- Total Cost per Km of Line
- New Micro-embedded Generation Facilities Connected On Time
- Liquidity: Current Ratio (Current Assets / Current Liabilities)
- Leverage: Total Debt (includes shot-term and long-term debt)

1.1 ADDITIONAL ELENCHUS SUPPORT

The publishing of the second OEB mandated Scorecard for LDC's is a key element of an evolving regulatory process. There are growing expectations not only for LDC's to measure and continuously improve performance, but also to be able to demonstrate that the LDC's operating processes, corporate culture and governance support the RRFE objectives.

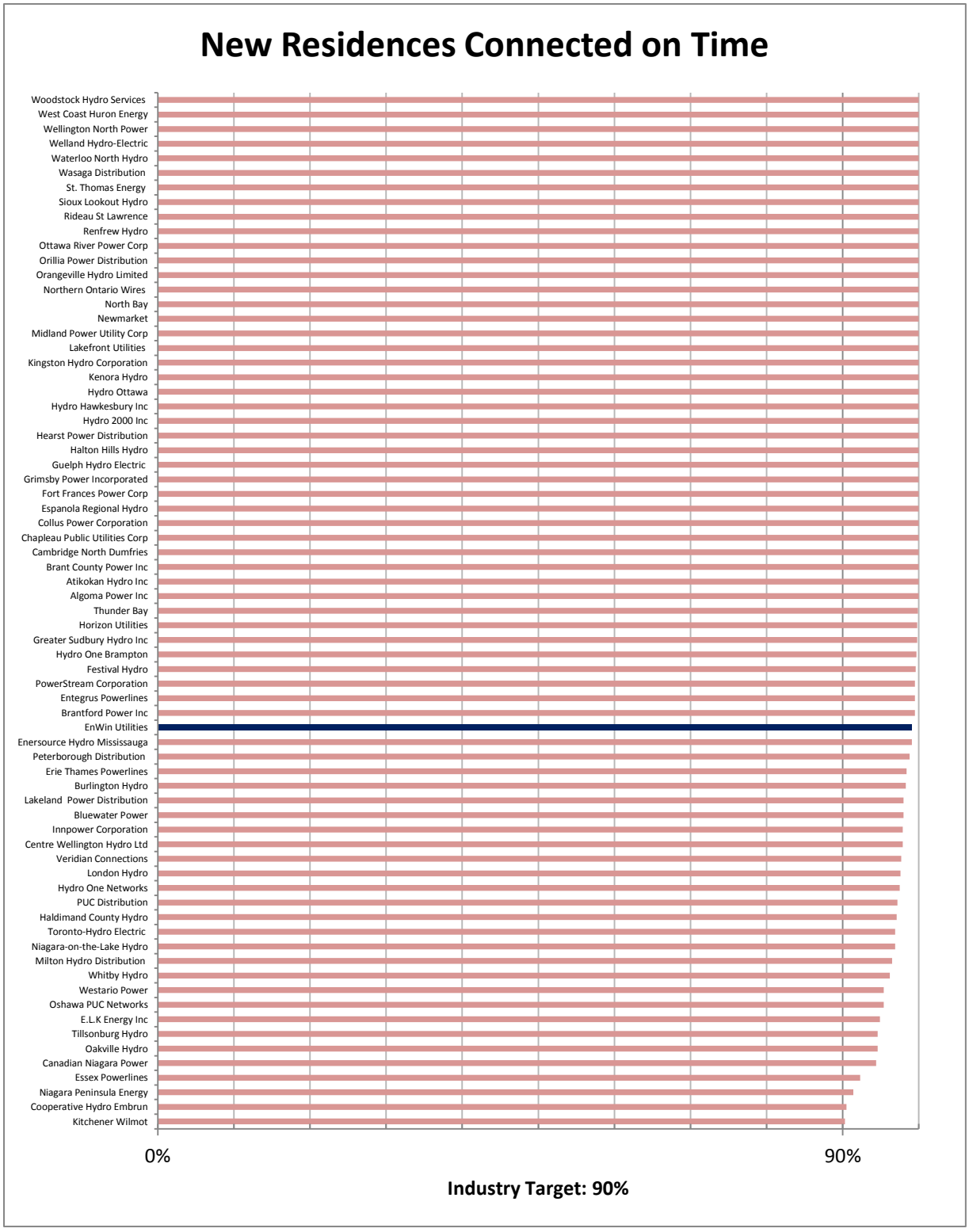
Elenchus has the skilled and experienced resources to assist you with this evolving process of integrating regulatory strategy into business solutions. Elenchus would be please to help you on a consulting basis, including the following:

- Providing additional data analysis, including expanded and targeted comparable groupings, rankings and historic trending to identify LDC's that have improved performance in metrics of interest;
- Assisting with the process of interpreting and learning from your Scorecard results; and
- Facilitating education and strategic planning to build on the management opportunities of using a Scorecard, such as these services Elenchus has delivered to LDC's of various sizes:
    - Workshops with LDC boards, executives, management and employees to understand and strategically plan for and implement the OEB's RRFE; and
    - Projects to integrate regulatory and business strategies for productivity, Scorecards, performance management, succession planning and management variable incentive pay.

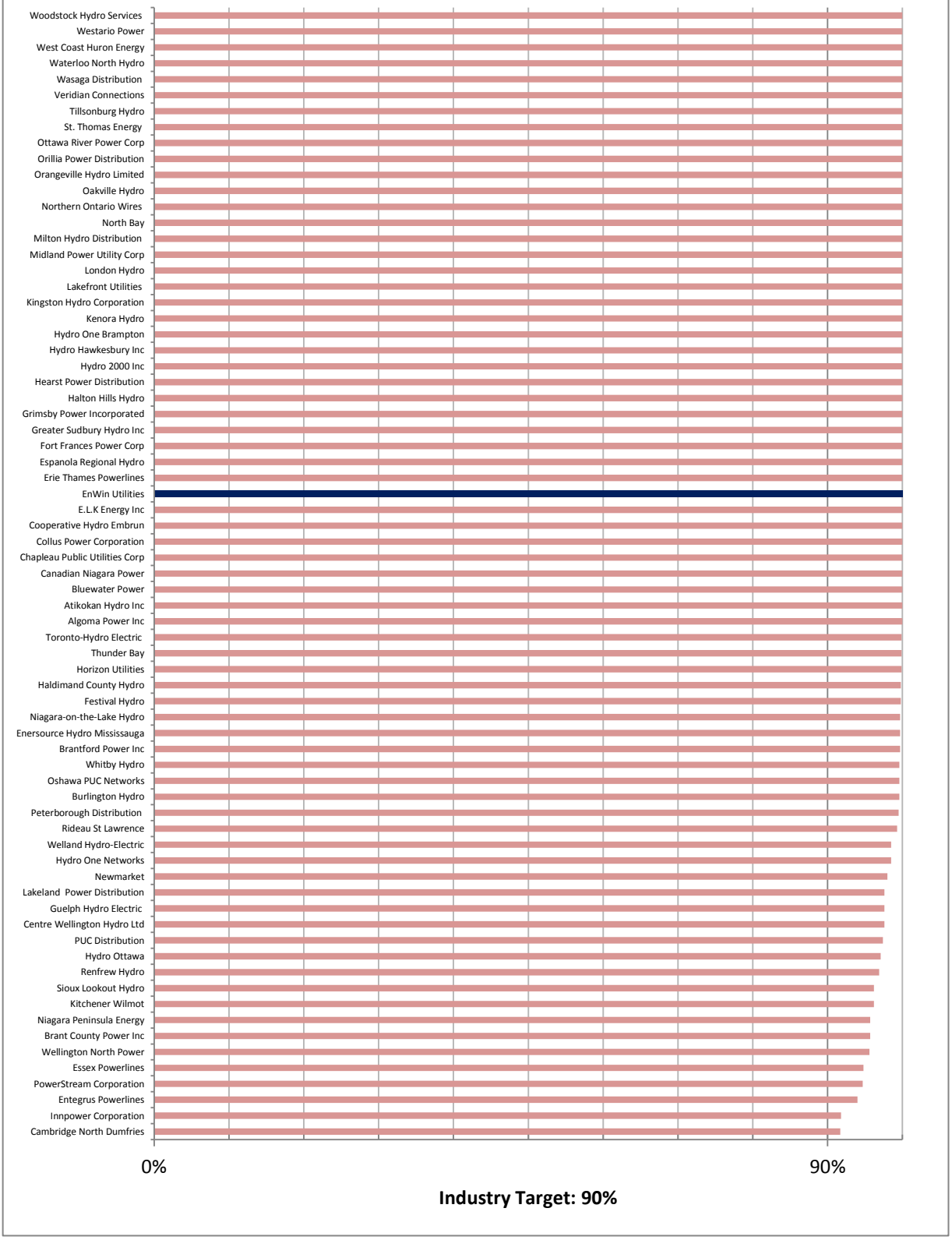
If this is of interest to you, please contact: Andrew Frank at 416-348-9917 x21, Anna Luciani-Marzo at 416-348-9917 x36, or Chris Hatley at 416-348-9917 x26.

2 TABLES COMPARING ALL LDCS

EnWin Utilities's performance relative to the full group is reflected in the following tables:

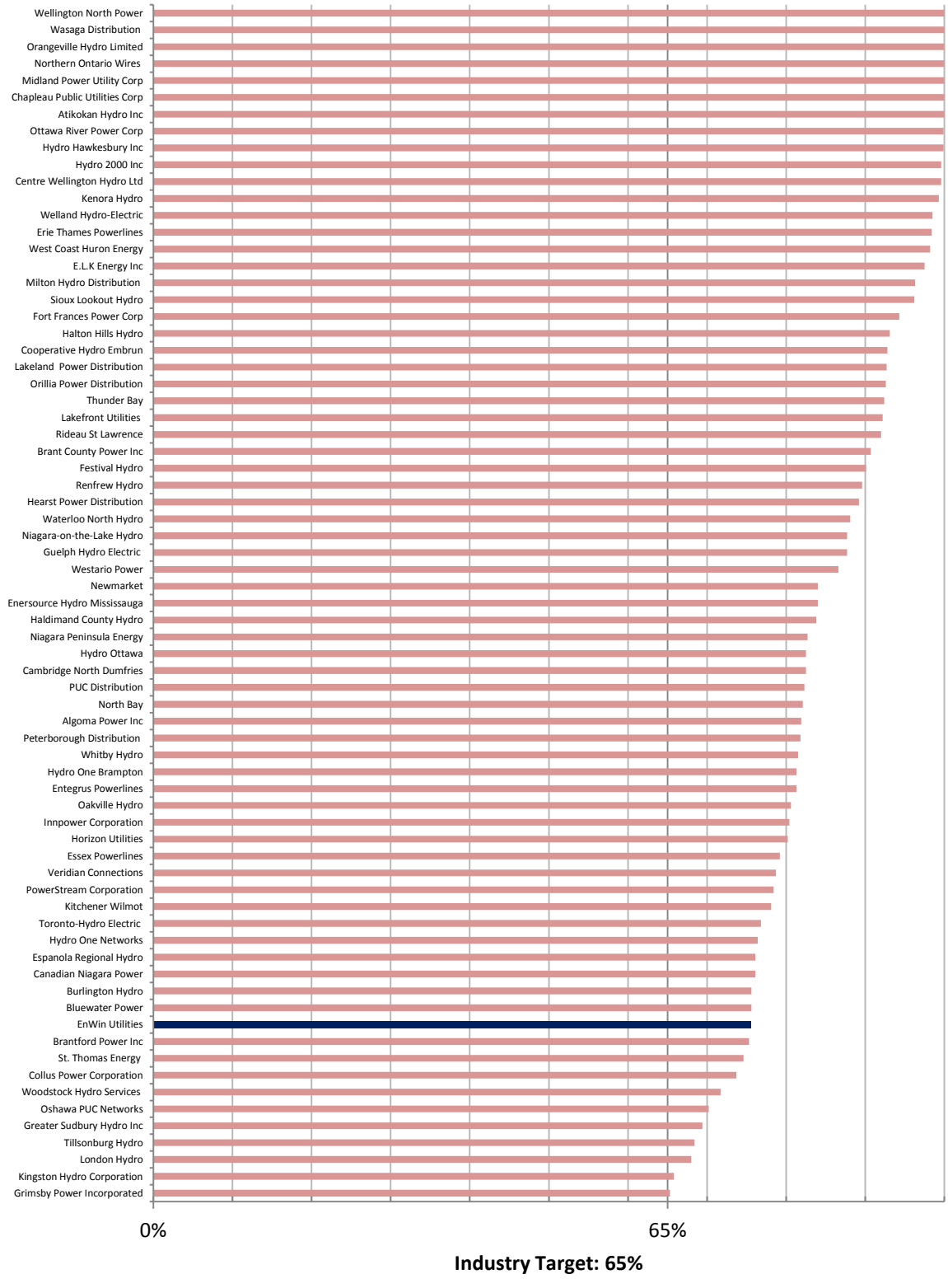


Appointments Met On Time

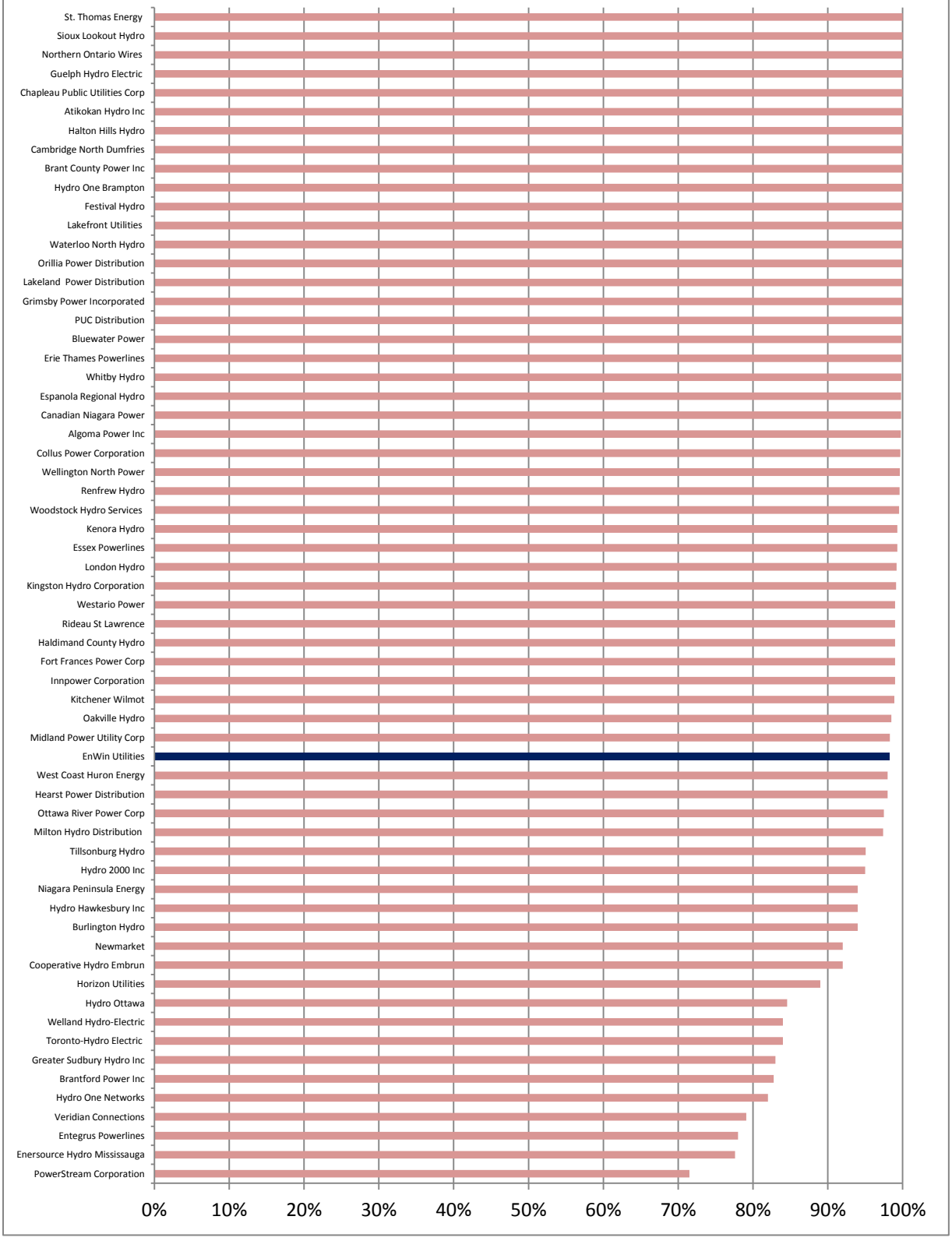


Industry Target: 90%

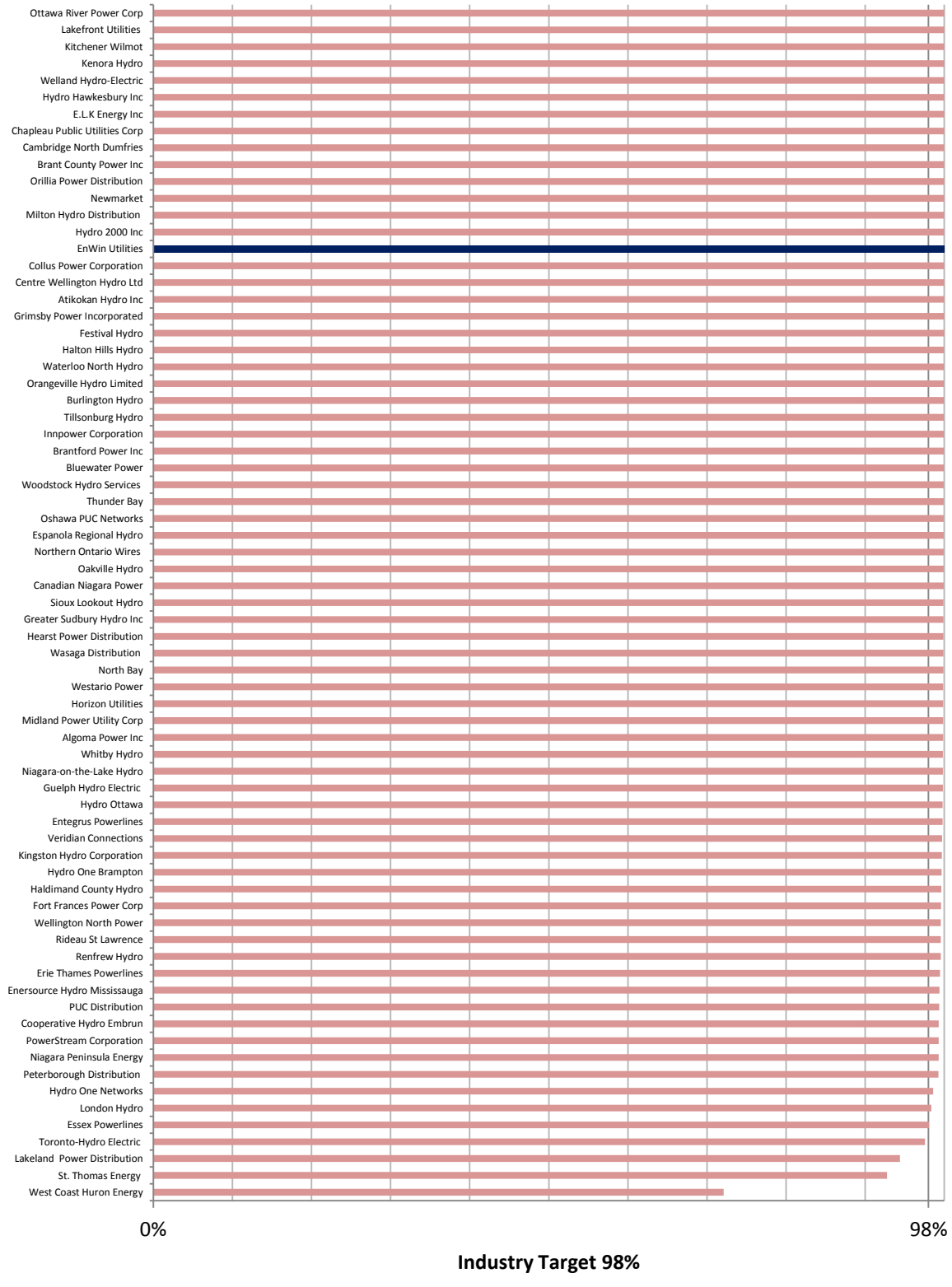
Telephone Calls Answered On Time



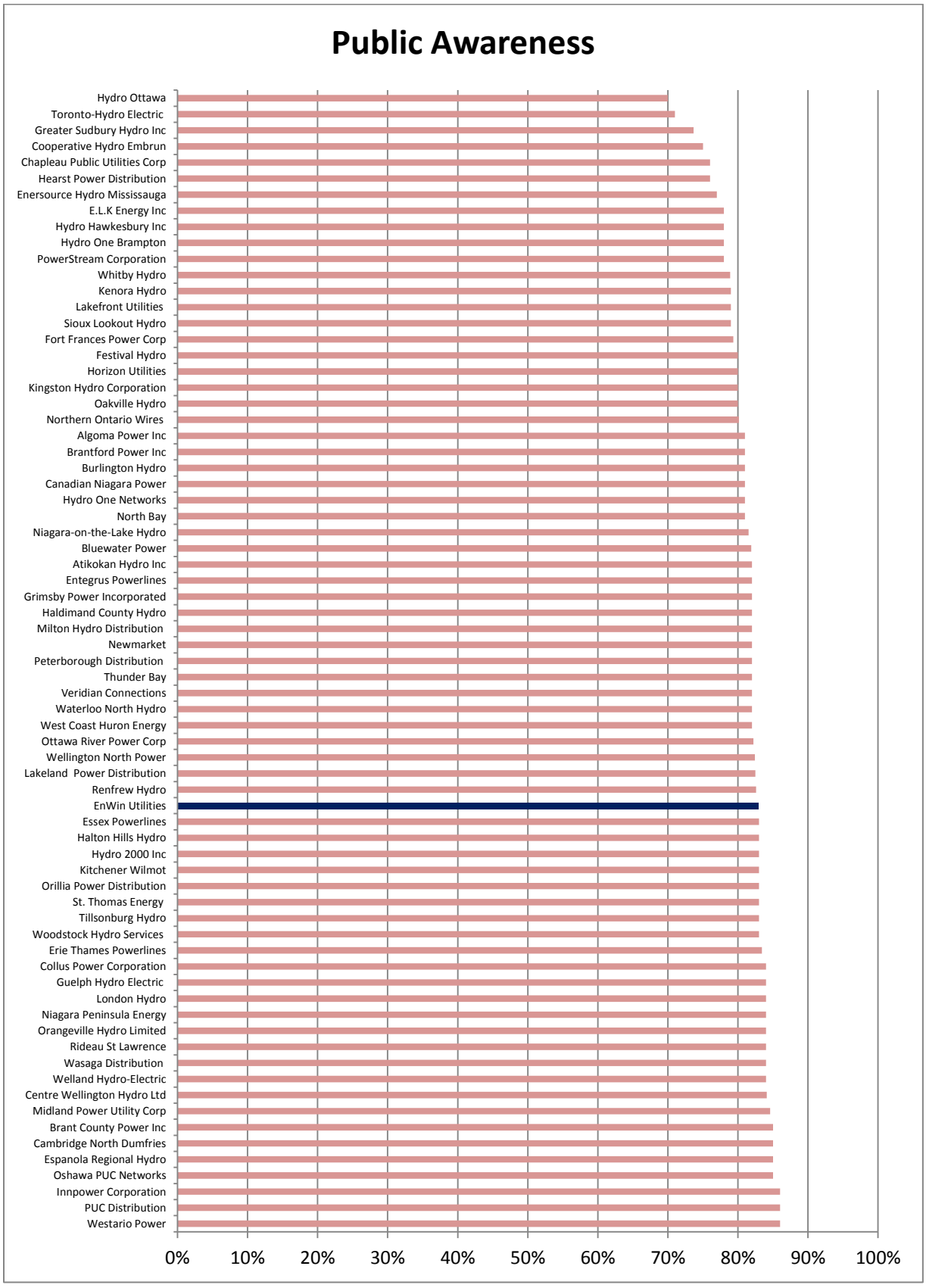
First Contact Resolution



Billing Accuracy

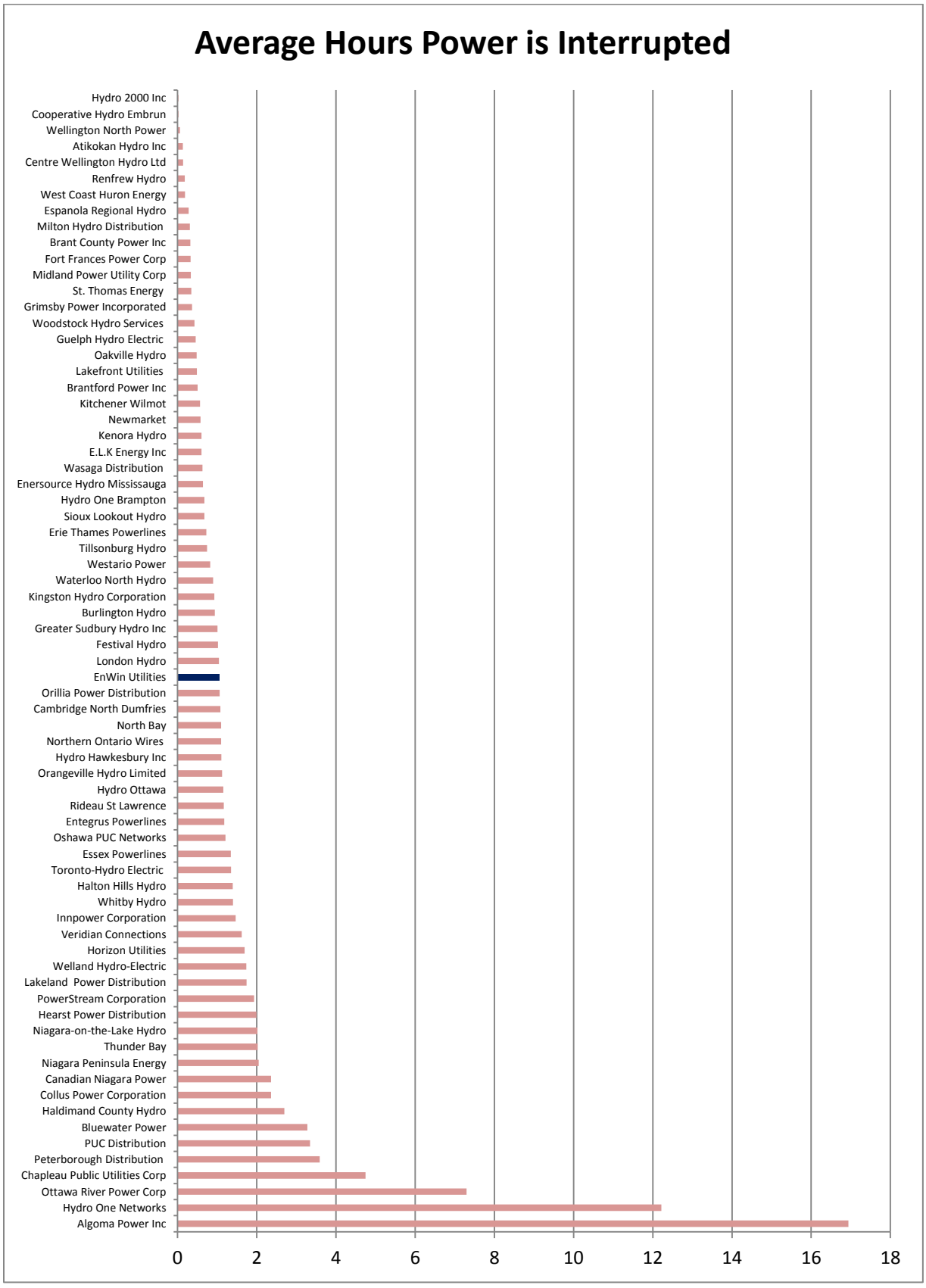


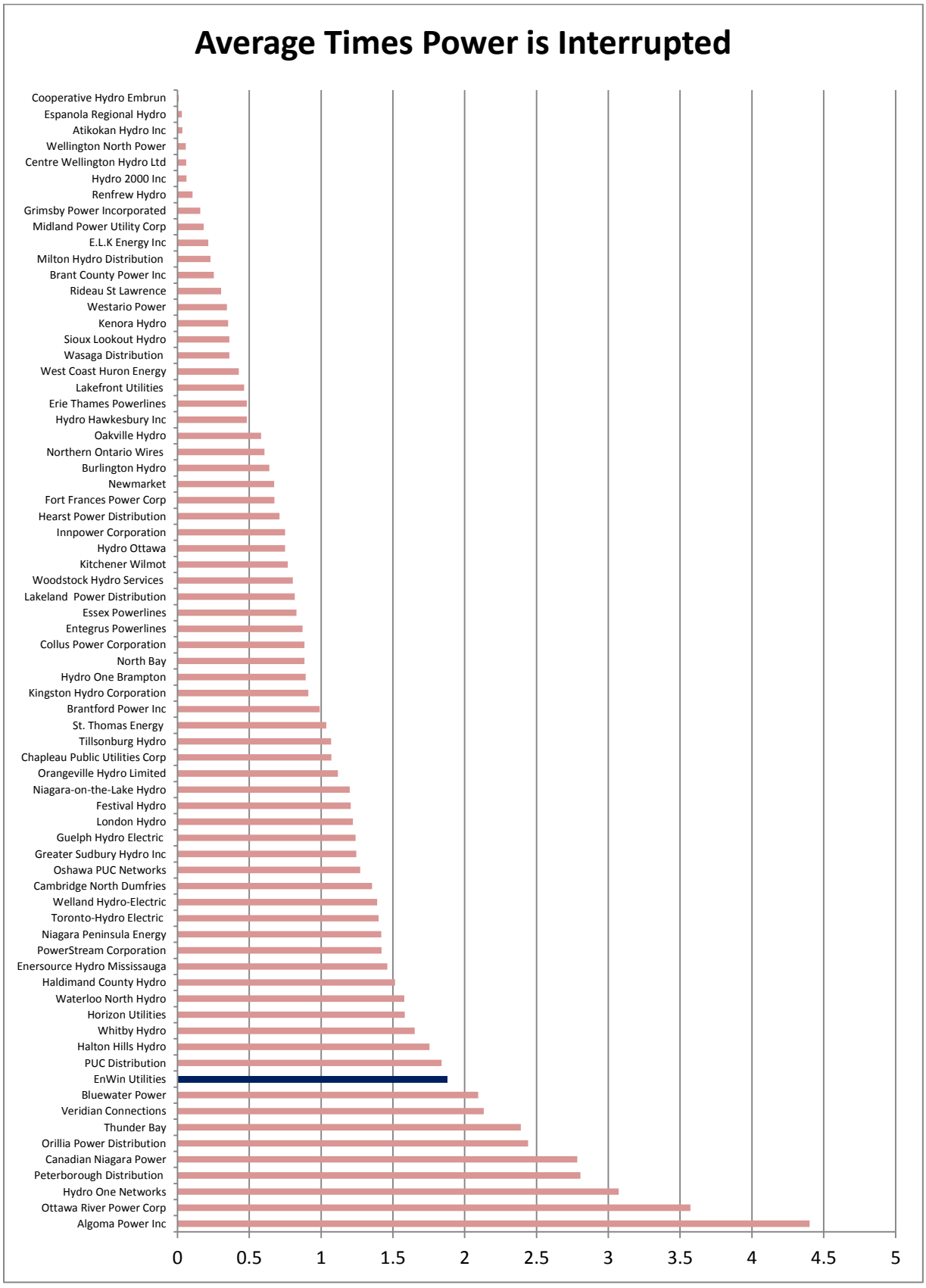

Customer Satisfaction Survey Results
Kenora Hydro
Bluewater Power
West Coast Huron Energy
Festival Hydro
PUC Distribution
Essex Powerlines
Hydro One Networks
Midland Power Utility Corp
Lakeland Power Distribution
Hydro Ottawa
Niagara Peninsula Energy
Niagara-on-the-Lake Hydro
Westario Power
Fort Frances Power Corp
Erie Thames Powerlines
Espanola Regional Hydro
Northern Ontario Wires
Sioux Lookout Hydro
Burlington Hydro
Cooperative Hydro Embrun
Enersource Hydro Mississauga
Halton Hills Hydro
Veridian Connections
Welland Hydro-Electric
PowerStream Corporation
Entegrus Powerlines
Toronto-Hydro Electric
Algoma Power Inc
Greater Sudbury Hydro Inc
Grimsby Power Incorporated
Horizon Utilities
Hydro Hawkesbury Inc
Oakville Hydro
Renfrew Hydro
Oshawa PUC Networks
Brantford Power Inc
Canadian Niagara Power
Newmarket
Chapleau Public Utilities Corp
Guelph Hydro Electric
Waterloo North Hydro
Woodstock Hydro Services
Haldimand County Hydro
Hearst Power Distribution
Hydro 2000 Inc
0%
10%
20%
30%
40%
50%
60%
70%
80%
90%
100%


Public Awareness
Hydro Ottawa
Toronto-Hydro Electric
Greater Sudbury Hydro Inc
Cooperative Hydro Embrun
Chapleau Public Utilities Corp
Hearst Power Distribution
Enersource Hydro Mississauga
E.L.K Energy Inc
Hydro Hawkesbury Inc
Hydro One Brampton
PowerStream Corporation
Whitby Hydro
Kenora Hydro
Lakefront Utilities
Sioux Lookout Hydro
Fort Frances Power Corp
Festival Hydro
Horizon Utilities
Kingston Hydro Corporation
Oakville Hydro
Northern Ontario Wires
Algoma Power Inc
Brantford Power Inc
Burlington Hydro
Canadian Niagara Power
Hydro One Networks
North Bay
Niagara-on-the-Lake Hydro
Bluewater Power
Atikokan Hydro Inc
Entegrus Powerlines
Grimsby Power Incorporated
Haldimand County Hydro
Milton Hydro Distribution
Newmarket
Peterborough Distribution
Thunder Bay
Veridian Connections
Waterloo North Hydro
West Coast Huron Energy
Ottawa River Power Corp
Wellington North Power
Lakeland Power Distribution
Renfrew Hydro
EnWin Utilities
Essex Powerlines
Halton Hills Hydro
Hydro 2000 Inc
Kitchener Wilmot
Orillia Power Distribution
St. Thomas Energy
Tillsonburg Hydro
Woodstock Hydro Services
Erie Thames Powerlines
Collus Power Corporation
Guelph Hydro Electric
London Hydro
Niagara Peninsula Energy
Orangeville Hydro Limited
Rideau St Lawrence
Wasaga Distribution
Welland Hydro-Electric
Centre Wellington Hydro Ltd
Midland Power Utility Corp
Brant County Power Inc
Cambridge North Dumfries
Espanola Regional Hydro
Oshawa PUC Networks
Innpower Corporation
PUC Distribution
Westario Power
0%
10%
20%
30%
40%
50%
60%
70%
80%
90%
100%

Level of Compliance with Ontario Regulation 22/04

Compliant	
Algoma Power Inc.	Kitchener-Wilmot Hydro Inc.
Atikokan Hydro Inc.	Lakefront Utilities Inc.
Bluewater Power Distribution Corporation	Lakeland Power Distribution Ltd.
Brant County Power Inc.	London Hydro Inc.
Brantford Power Inc.	Midland Power Utility Corporation
Burlington Hydro Inc.	Milton Hydro Distribution Inc.
Cambridge and North Dumfries Hydro Inc.	Newmarket – Tay Power Distribution Ltd.
Centre Wellington Hydro Ltd.	Niagara Peninsula Energy Inc.
Chapleau Public Utilities Corporation	Niagara-on-the-Lake Hydro Inc.
Collus PowerStream Corporation	North Bay Hydro Distribution Limited
Cooperative Hydro Embrun Inc.	Northern Ontario Wires Inc.
E.L.K. Energy Inc.	Oakville Hydro Electricity Distribution Inc.
Enersource Hydro Mississauga Inc.	Orangeville Hydro Limited
Entegrus Powerlines Inc.	Orillia Power Distribution Corporation
EnWin Utilities Ltd.	Oshawa PUC Networks Inc.
Erie Thames Powerlines Corporation	Ottawa River Power Corporation
Espanola Regional Hydro Distribution Corporation	Peterborough Distribution Incorporated
Essex Powerlines Corporation	PowerStream Inc.
Festival Hydro Inc.	PUC Distribution Inc.
Fort Frances Power Corporation	Renfrew Hydro Inc.
Greater Sudbury Hydro Inc.	Rideau St. Lawrence Distribution Inc.
Guelph Hydro Electric Systems Inc.	Sioux Lookout Hydro Inc.
Haldimand County Hydro Inc.	St. Thomas Energy Inc.
Halton Hills Hydro Inc.	Thunder Bay Hydro Electricity Distribution Inc.
Hearst Power Distribution Company Limited	Toronto Hydro-Electric System Limited
Horizon Utilities Corporation	Veridian Connections Inc.
Hydro 2000 Inc.	Wasaga Distribution Inc.
Hydro Hawkesbury Inc.	Waterloo North Hydro Inc.
Hydro One Brampton Networks Inc.	Welland Hydro-Electric System Corp.
Hydro One Networks Inc.	Wellington North Power Inc.
Hydro Ottawa Limited	West Coast Huron Energy Inc.
Innpower Corporation	Westario Power Inc.
Kenora Hydro Electric Corporation Ltd.	Whitby Hydro Electric Corporation
Kingston Hydro Corporation	Woodstock Hydro Services Inc.
Needs Improvement	
Canadian Niagara Power Inc.	
Grimsby Power Incorporated	
Tillsonburg Hydro Inc.	

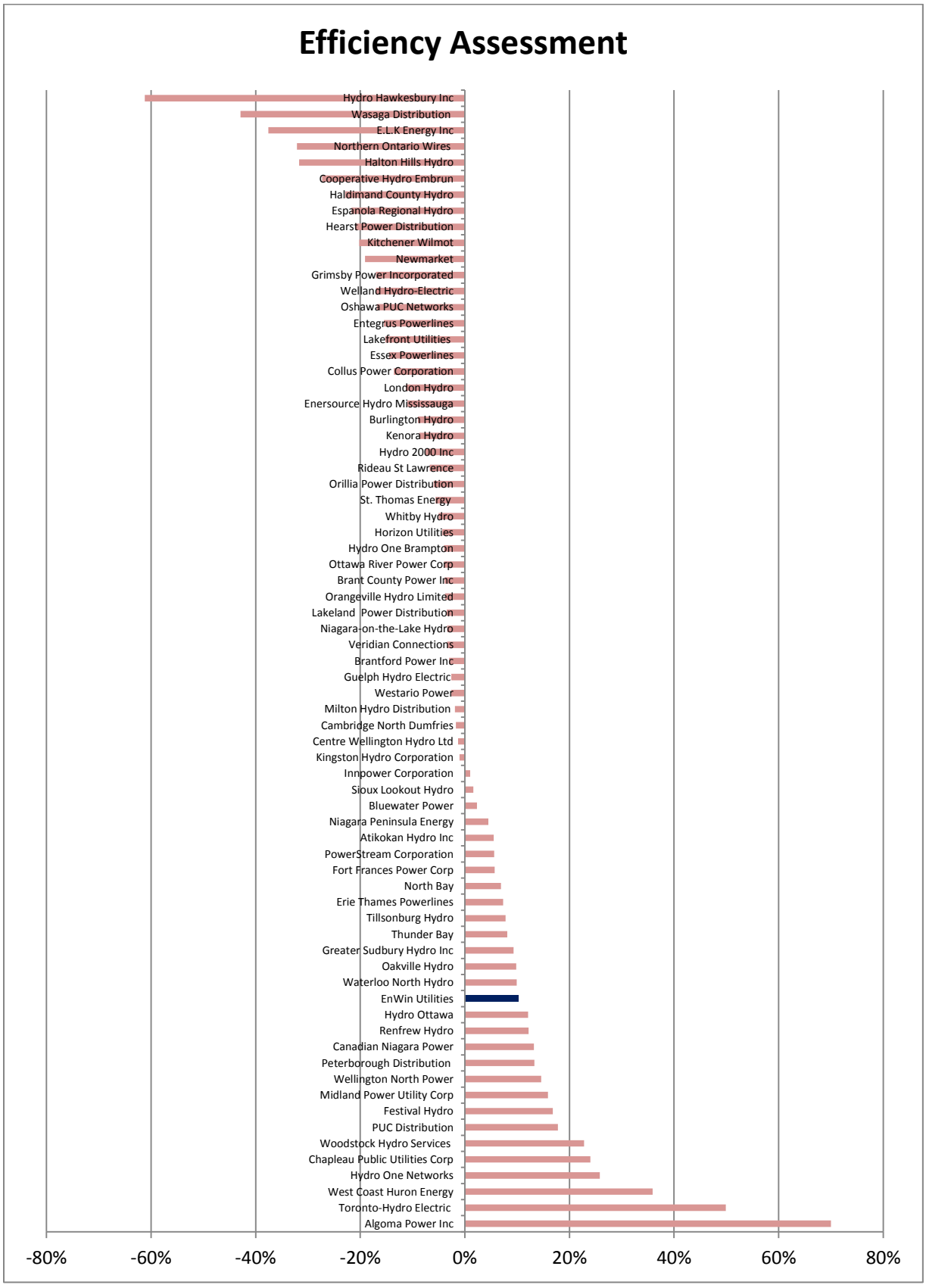

Average Hours Power is Interrupted
Hydro 2000 Inc
Cooperative Hydro Embrun
Wellington North Power
Atikokan Hydro Inc
Centre Wellington Hydro Ltd
Renfrew Hydro
West Coast Huron Energy
Espanola Regional Hydro
Milton Hydro Distribution
Brant County Power Inc
Fort Frances Power Corp
Midland Power Utility Corp
St. Thomas Energy
Grimsby Power Incorporated
Woodstock Hydro Services
Guelph Hydro Electric
Oakville Hydro
Lakefront Utilities
Brantford Power Inc
Kitchener Wilmot
Newmarket
Kenora Hydro
E.L.K Energy Inc
Wasaga Distribution
Enersource Hydro Mississauga
Hydro One Brampton
Sioux Lookout Hydro
Erie Thames Powerlines
Tillsonburg Hydro
Westario Power
Waterloo North Hydro
Kingston Hydro Corporation
Burlington Hydro
Greater Sudbury Hydro Inc
Festival Hydro
London Hydro
EnWin Utilities
Orillia Power Distribution
Cambridge North Dumfries
North Bay
Northern Ontario Wires
Hydro Hawkesbury Inc
Orangeville Hydro Limited
Hydro Ottawa
Rideau St Lawrence
Entegrus Powerlines
Oshawa PUC Networks
Essex Powerlines
Toronto-Hydro Electric
Halton Hills Hydro
Whitby Hydro
Innpower Corporation
Veridian Connections
Horizon Utilities
Welland Hydro-Electric
Lakeland Power Distribution
PowerStream Corporation
Hearst Power Distribution
Niagara-on-the-Lake Hydro
Thunder Bay
Niagara Peninsula Energy
Canadian Niagara Power
Collus Power Corporation
Haldimand County Hydro
Bluewater Power
PUC Distribution
Peterborough Distribution
Chapleau Public Utilities Corp
Ottawa River Power Corp
Hydro One Networks
Algoma Power Inc
0
2
4
6
8
10
12
14
16
18

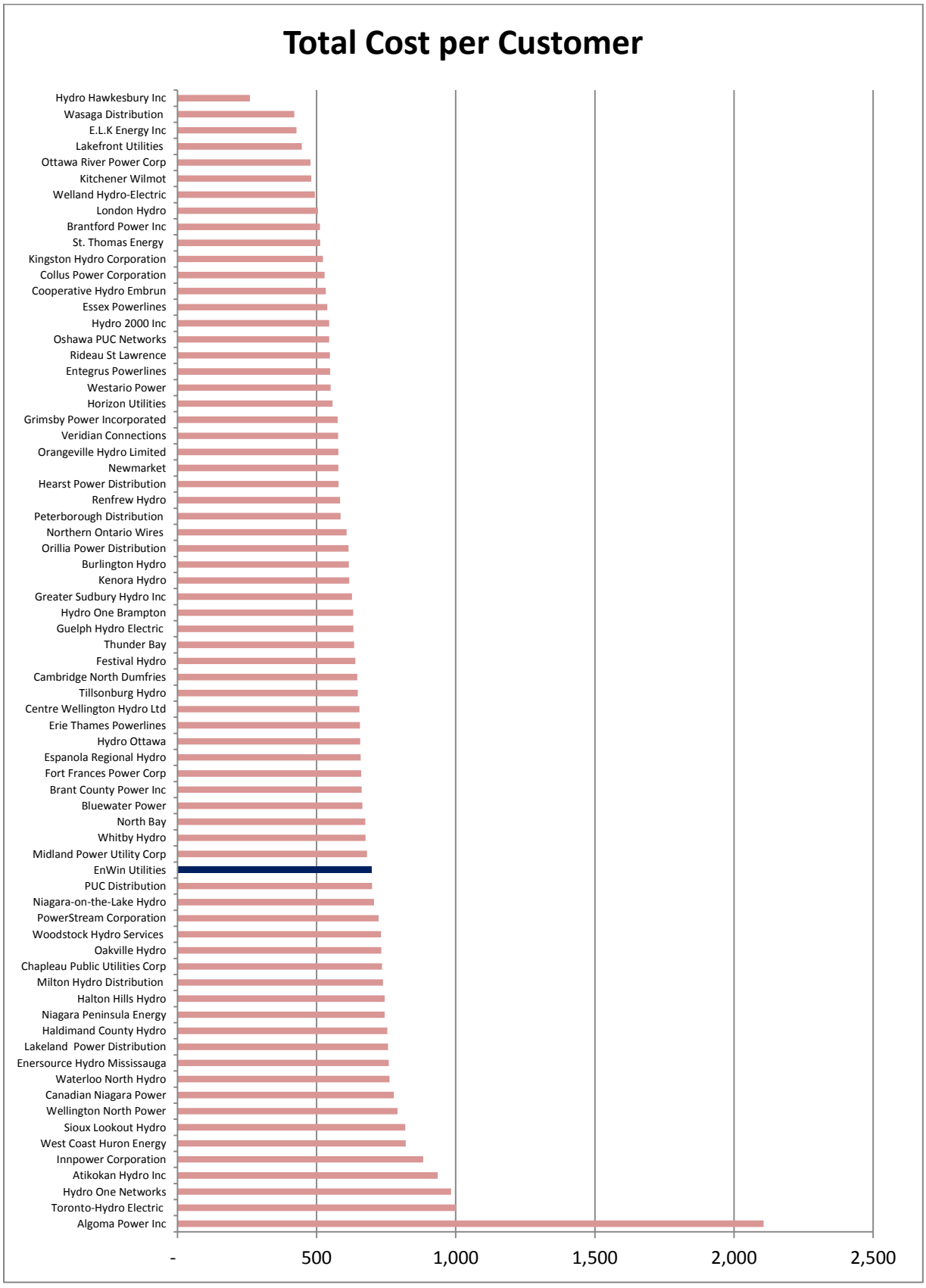

Average Times Power is Interrupted
Cooperative Hydro Embrun
Espanola Regional Hydro
Atikokan Hydro Inc
Wellington North Power
Centre Wellington Hydro Ltd
Hydro 2000 Inc
Renfrew Hydro
Grimsby Power Incorporated
Midland Power Utility Corp
E.L.K Energy Inc
Milton Hydro Distribution
Brant County Power Inc
Rideau St Lawrence
Westario Power
Kenora Hydro
Sioux Lookout Hydro
Wasaga Distribution
West Coast Huron Energy
Lakefront Utilities
Erie Thames Powerlines
Hydro Hawkesbury Inc
Oakville Hydro
Northern Ontario Wires
Burlington Hydro
Newmarket
Fort Frances Power Corp
Hearst Power Distribution
Innpower Corporation
Hydro Ottawa
Kitchener Wilmot
Woodstock Hydro Services
Lakeland Power Distribution
Essex Powerlines
Entegrus Powerlines
Collus Power Corporation
North Bay
Hydro One Brampton
Kingston Hydro Corporation
Brantford Power Inc
St. Thomas Energy
Tillsonburg Hydro
Chapleau Public Utilities Corp
Orangeville Hydro Limited
Niagara-on-the-Lake Hydro
Festival Hydro
London Hydro
Guelph Hydro Electric
Greater Sudbury Hydro Inc
Oshawa PUC Networks
Cambridge North Dumfries
Welland Hydro-Electric
Toronto-Hydro Electric
Niagara Peninsula Energy
PowerStream Corporation
Enersource Hydro Mississauga
Haldimand County Hydro
Waterloo North Hydro
Horizon Utilities
Whitby Hydro
Halton Hills Hydro
PUC Distribution
EnWin Utilities
Bluewater Power
Veridian Connections
Thunder Bay
Orillia Power Distribution
Canadian Niagara Power
Peterborough Distribution
Hydro One Networks
Ottawa River Power Corp
Algoma Power Inc
0
0.5
1
1.5
2
2.5
3
3.5
4
4.5
5

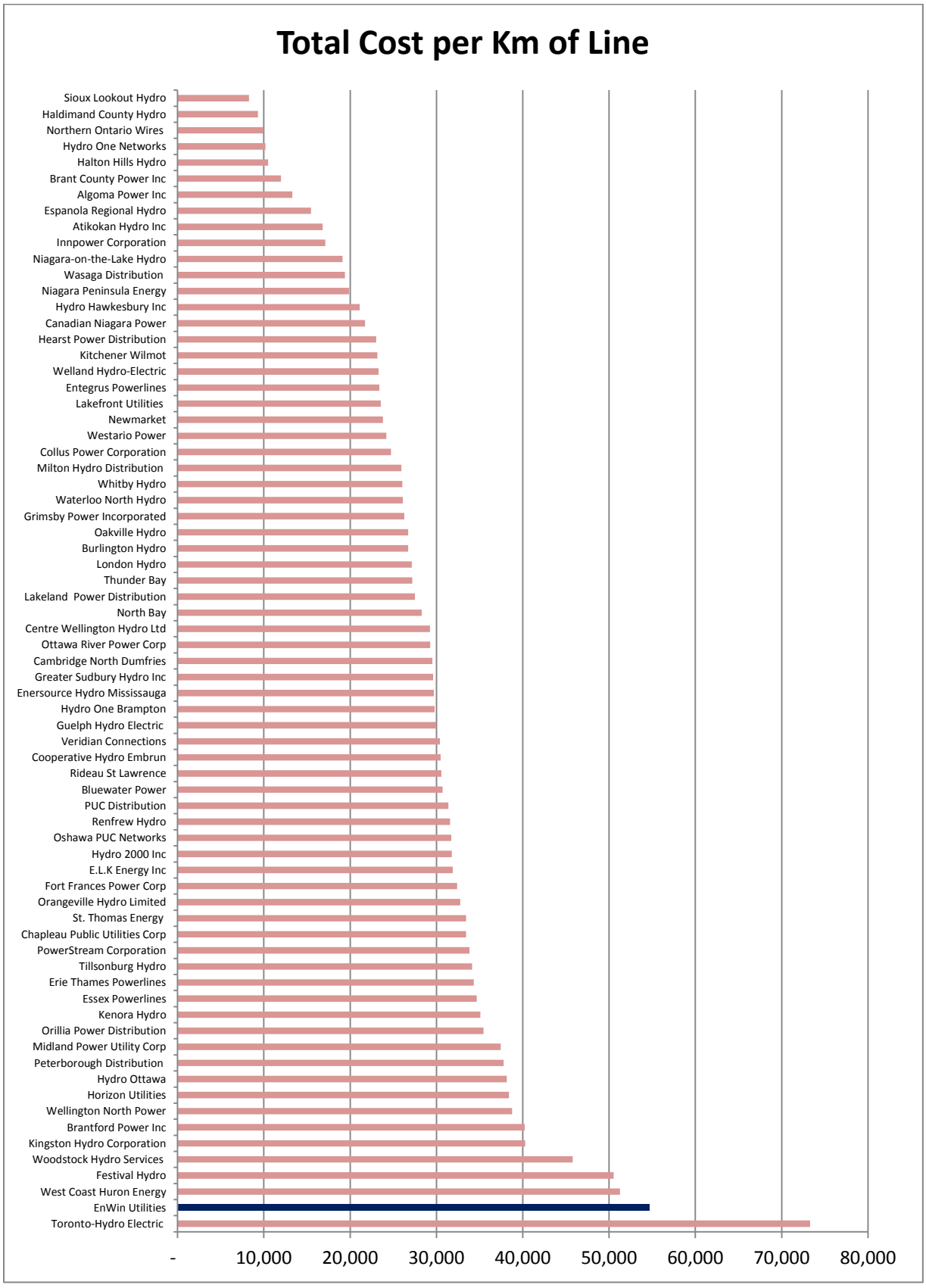
Distribution System Plan Implementation Progress

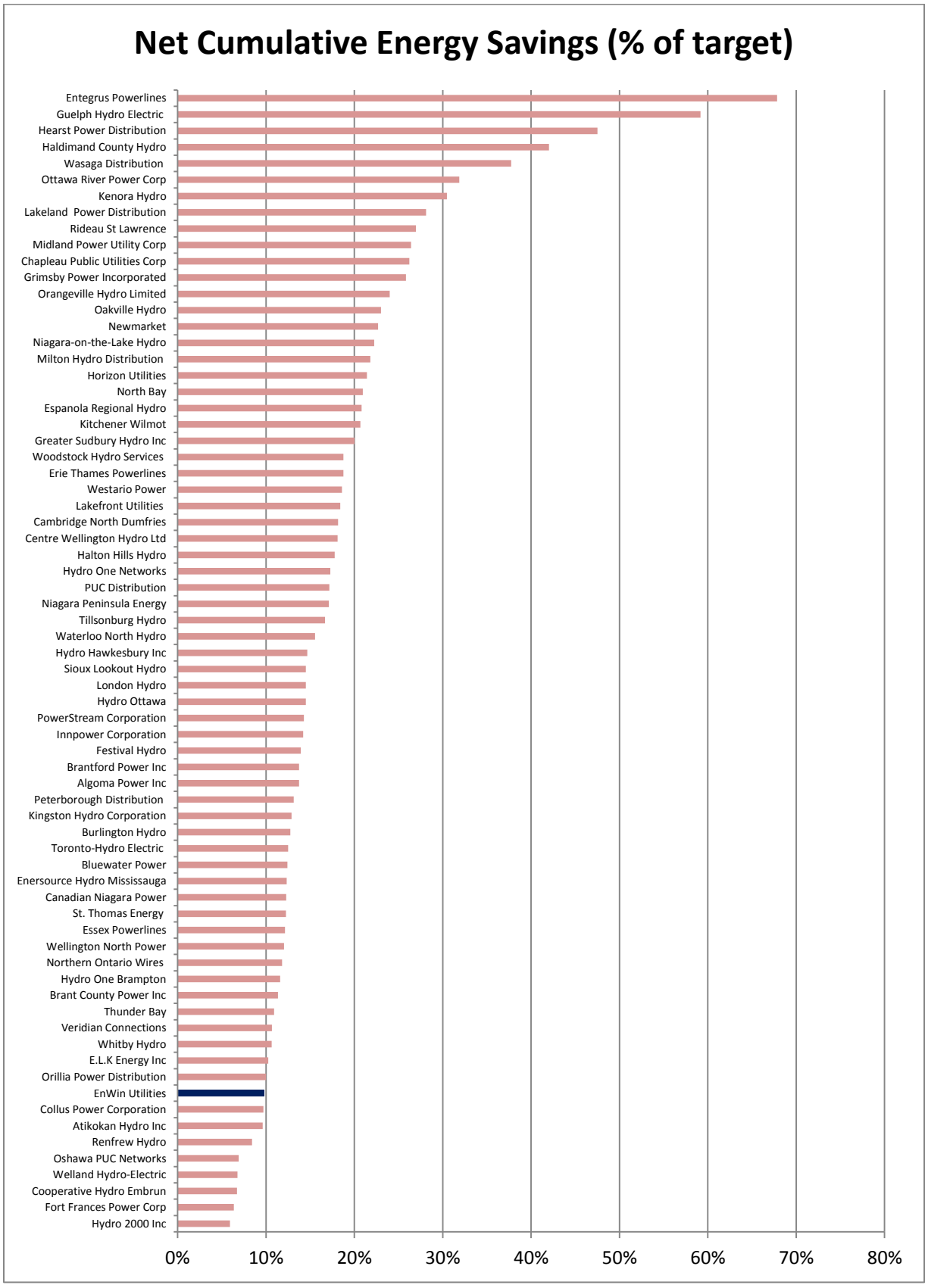
Percentage	
Enersource Hydro Mississauga	126%
Horizon Utilities	121.17%
Waterloo North Hydro	119.44%
Hydro One Networks	116%
Festival Hydro Inc.	107.67%
Essex Powerlines	107%
Orangeville Hydro Limited	101%
Whitby Hydro	100.98%
Entegrus Powerlines Inc.	100%
Peterborough Distribution	100%
St. Thomas Energy	100%
Toronto Hydro-Electric System Limited	100%
PowerStream Corporation	99.8%
Guelph Hydro Electric	99.34%
Newmarket	99%
Oshawa PUC Networks	99%
EnWin Utilities Ltd.	96%
Niagara Peninsula Energy	94.55%
Erie Thames Powerlines	94%
Hydro Ottawa	94%
North Bay	94%
Midland Power Utility Corp	93.75%
Hydro One Brampton	92.3%
Centre Wellington Hydro Ltd	89%
Niagara-on-the-Lake Hydro	89%
Veridian Connections	88.45%
Greater Sudbury Hydro Inc	87.4%
Grimsby Power Incorporated	84%
Rideau St Lawrence	83%
Brantford Power Inc	80.9%
Renfrew Hydro	75%
West Coast Huron Energy	74%
Chapleau Public Utilities Corp	50%
Fort Frances Power Corp	49.8%
Hydro 2000 Inc	30%
Above Budget	
Bluewater Power Distribution Corporation	
Ahead of Plan	
Brant County Power Inc.	
DSP Filed	
Wellington North Power Inc.	

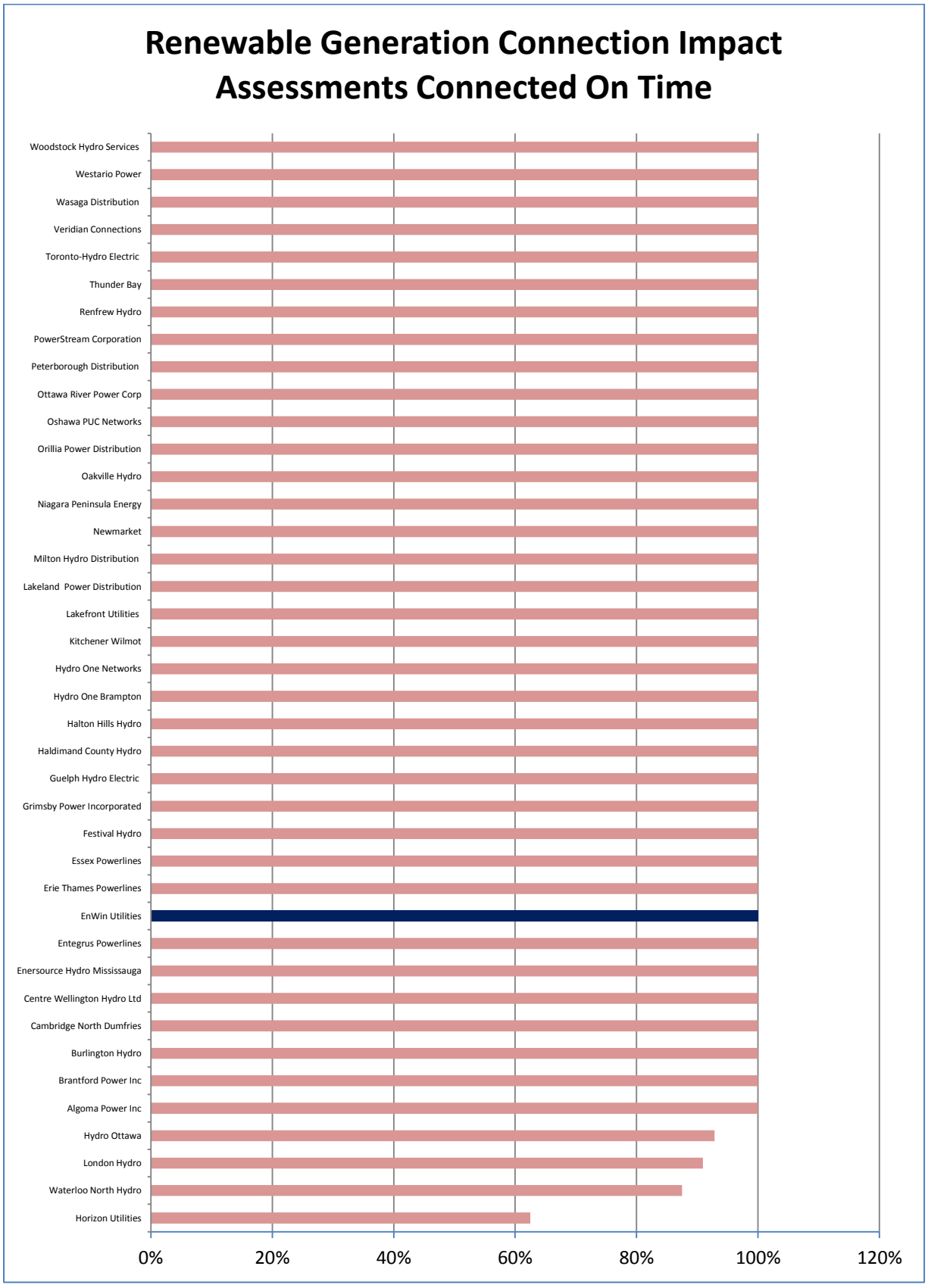
Completed
Algoma Power Inc.
Canadian Niagara Power Inc.
Lakefront Utilities
Wasaga Distribution
Established
Hearst Power Distribution Company Limited
Excellent
Northern Ontario Wires
OEB Approved
Ottawa River Power Corporation
On Target
Atikokan Hydro Inc.
Haldimand County Hydro Inc.
On Track
Burlington Hydro
Espanola Regional Hydro
Halton Hills Hydro
Kingston Hydro Corporation
Milton Hydro Distribution
Oakville Hydro Electricity Distribution Inc.
Thunder Bay Hydro Electricity Distribution
Welland Hydro-Electric System Corp.
Stage 2
Sioux Lookout Hydro Inc.
In Progress
Collus Power Corporation
Cooperative Hydro Embrun
E.L.K Energy Inc.
Hydro Hawkesbury Inc.
Innpower Corporation
Kenora Hydro Electric Corporation Ltd.
Kitchener-Wilmot Hydro Inc.
Lakeland Power Distribution Ltd.
London Hydro Inc.
Orillia Power Distribution Corporation
PUC Distribution Inc.
Tillsonburg Hydro Inc.
Westario Power Inc.
Not Available
Woodstock Hydro Services Inc.
Behind Plan
Cambridge and North Dumfries Hydro Inc.


Efficiency Assessment
Hydro Hawkesbury Inc
Wasaga Distribution
E.L.K Energy Inc
Northern Ontario Wires
Halton Hills Hydro
Cooperative Hydro Embrun
Haldimand County Hydro
Espanola Regional Hydro
Hearst Power Distribution
Kitchener Wilmot
Newmarket
Grimsby Power Incorporated
Welland Hydro-Electric
Oshawa PUC Networks
Entegrus Powerlines
Lakefront Utilities
Essex Powerlines
Collus Power Corporation
London Hydro
Enersource Hydro Mississauga
Burlington Hydro
Kenora Hydro
Hydro 2000 Inc
Rideau St Lawrence
Orillia Power Distribution
St. Thomas Energy
Whitby Hydro
Horizon Utilities
Hydro One Brampton
Ottawa River Power Corp
Brant County Power Inc
Orangeville Hydro Limited
Lakeland Power Distribution
Niagara-on-the-Lake Hydro
Veridian Connections
Brantford Power Inc
Guelph Hydro Electric
Westario Power
Milton Hydro Distribution
Cambridge North Dumfries
Centre Wellington Hydro Ltd
Kingston Hydro Corporation
Innpower Corporation
Sioux Lookout Hydro
Bluewater Power
Niagara Peninsula Energy
Atikokan Hydro Inc
PowerStream Corporation
Fort Frances Power Corp
North Bay
Erie Thames Powerlines
Tillsonburg Hydro
Thunder Bay
Greater Sudbury Hydro Inc
Oakville Hydro
Waterloo North Hydro
EnWin Utilities
Hydro Ottawa
Renfrew Hydro
Canadian Niagara Power
Peterborough Distribution
Wellington North Power
Midland Power Utility Corp
Festival Hydro
PUC Distribution
Woodstock Hydro Services
Chapleau Public Utilities Corp
Hydro One Networks
West Coast Huron Energy
Toronto-Hydro Electric
Algoma Power Inc
-80%
-60%
-40%
-20%
0%
20%
40%
60%
80%

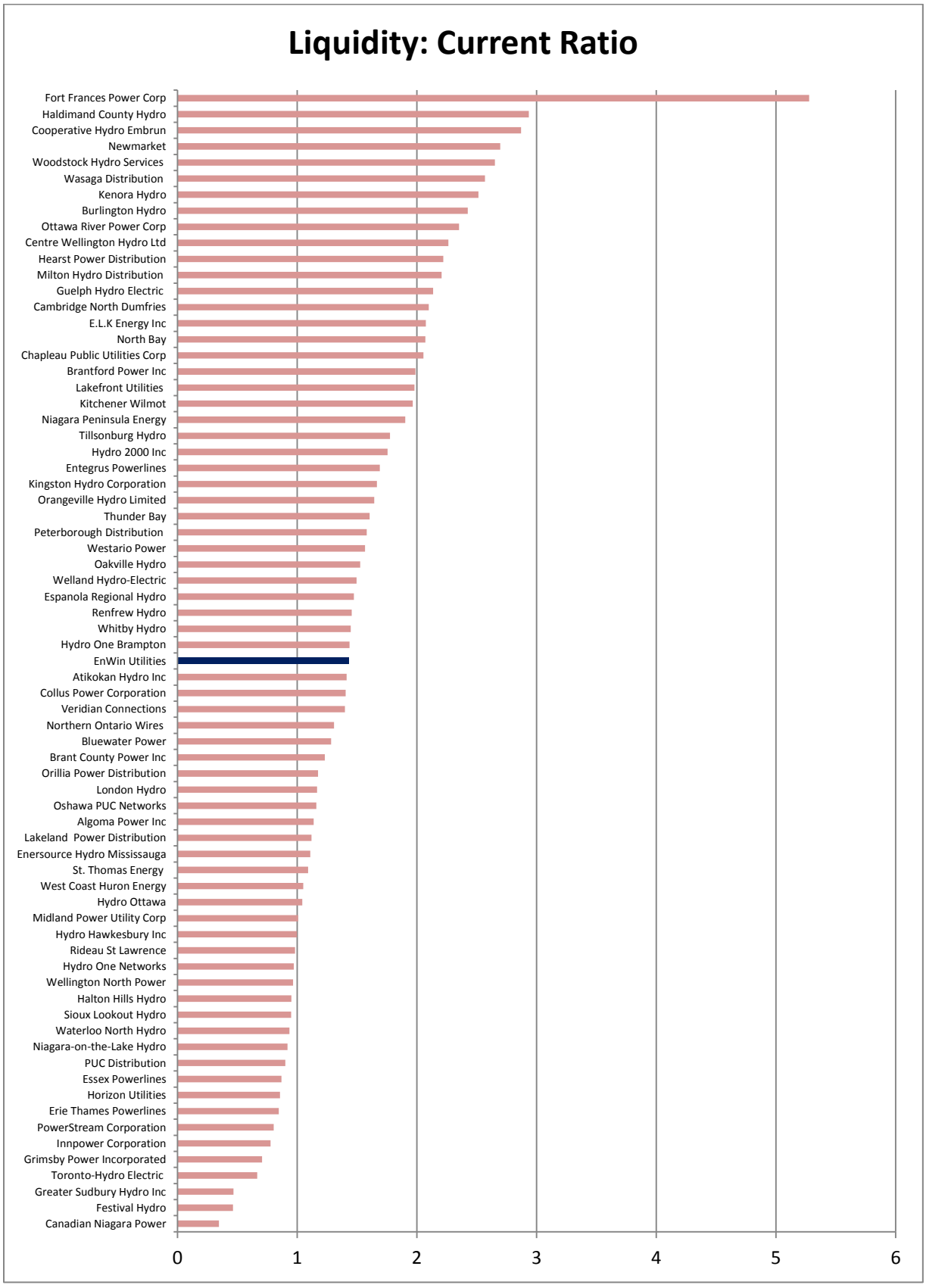

Total Cost per Customer
Hydro Hawkesbury Inc
Wasaga Distribution
E.L.K Energy Inc
Lakefront Utilities
Ottawa River Power Corp
Kitchener Wilmot
Welland Hydro-Electric
London Hydro
Brantford Power Inc
St. Thomas Energy
Kingston Hydro Corporation
Collus Power Corporation
Cooperative Hydro Embrun
Essex Powerlines
Hydro 2000 Inc
Oshawa PUC Networks
Rideau St Lawrence
Entegrus Powerlines
Westario Power
Horizon Utilities
Grimsby Power Incorporated
Veridian Connections
Orangeville Hydro Limited
Newmarket
Hearst Power Distribution
Renfrew Hydro
Peterborough Distribution
Northern Ontario Wires
Orillia Power Distribution
Burlington Hydro
Kenora Hydro
Greater Sudbury Hydro Inc
Hydro One Brampton
Guelph Hydro Electric
Thunder Bay
Festival Hydro
Cambridge North Dumfries
Tillsonburg Hydro
Centre Wellington Hydro Ltd
Erie Thames Powerlines
Hydro Ottawa
Espanola Regional Hydro
Fort Frances Power Corp
Brant County Power Inc
Bluewater Power
North Bay
Whitby Hydro
Midland Power Utility Corp
EnWin Utilities
PUC Distribution
Niagara-on-the-Lake Hydro
PowerStream Corporation
Woodstock Hydro Services
Oakville Hydro
Chapleau Public Utilities Corp
Milton Hydro Distribution
Halton Hills Hydro
Niagara Peninsula Energy
Haldimand County Hydro
Lakeland Power Distribution
Enersource Hydro Mississauga
Waterloo North Hydro
Canadian Niagara Power
Wellington North Power
Sioux Lookout Hydro
West Coast Huron Energy
Innpower Corporation
Atikokan Hydro Inc
Hydro One Networks
Toronto-Hydro Electric
Algoma Power Inc
-
500
1,000
1,500
2,000
2,500

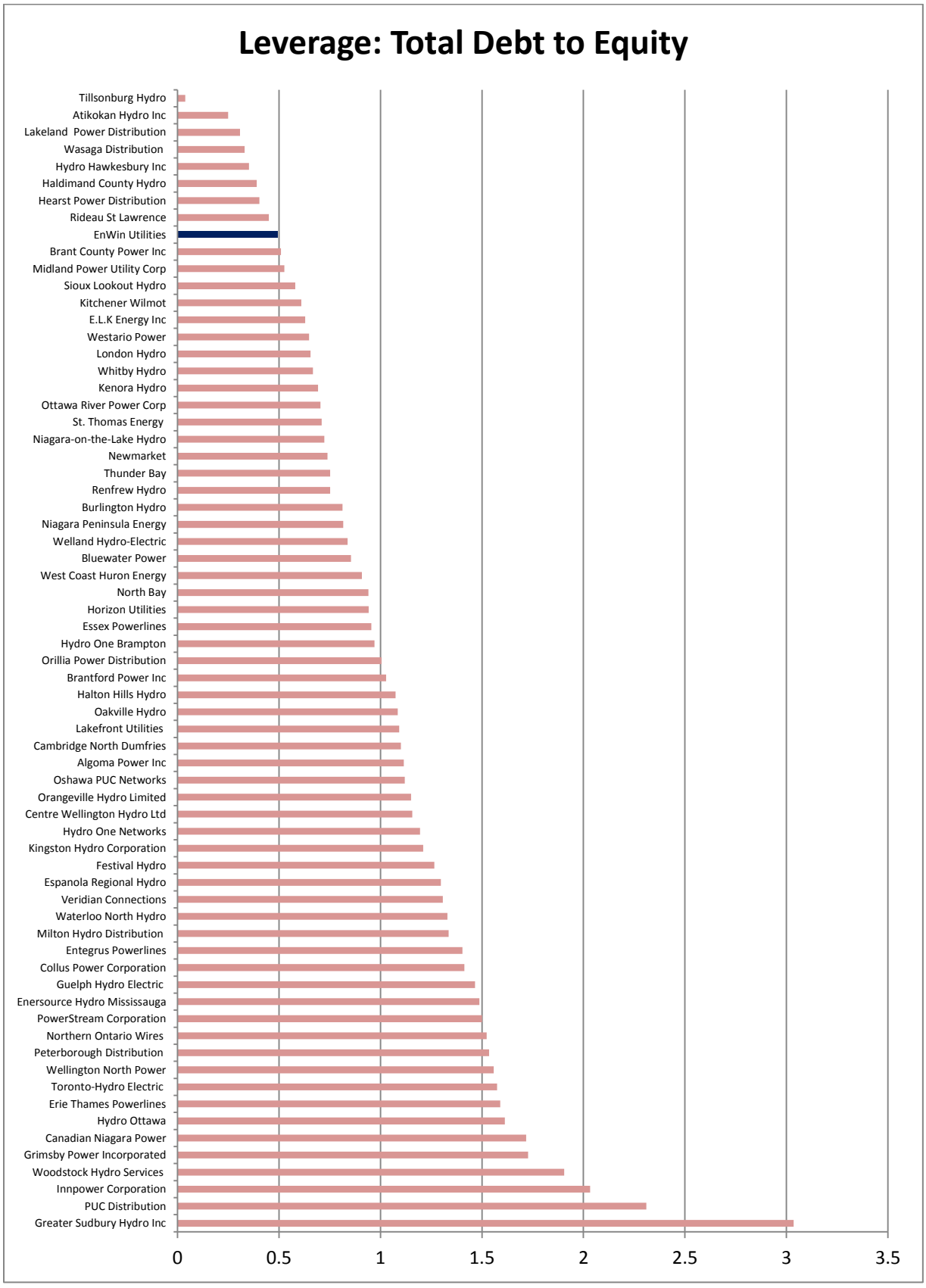

Total Cost per Km of Line
Sioux Lookout Hydro
Haldimand County Hydro
Northern Ontario Wires
Hydro One Networks
Halton Hills Hydro
Brant County Power Inc
Algoma Power Inc
Espanola Regional Hydro
Atikokan Hydro Inc
Innpower Corporation
Niagara-on-the-Lake Hydro
Wasaga Distribution
Niagara Peninsula Energy
Hydro Hawkesbury Inc
Canadian Niagara Power
Hearst Power Distribution
Kitchener Wilmot
Welland Hydro-Electric
Entegrus Powerlines
Lakefront Utilities
Newmarket
Westario Power
Collus Power Corporation
Milton Hydro Distribution
Whitby Hydro
Waterloo North Hydro
Grimsby Power Incorporated
Oakville Hydro
Burlington Hydro
London Hydro
Thunder Bay
Lakeland Power Distribution
North Bay
Centre Wellington Hydro Ltd
Ottawa River Power Corp
Cambridge North Dumfries
Greater Sudbury Hydro Inc
Enersource Hydro Mississauga
Hydro One Brampton
Guelph Hydro Electric
Veridian Connections
Cooperative Hydro Embrun
Rideau St Lawrence
Bluewater Power
PUC Distribution
Renfrew Hydro
Oshawa PUC Networks
Hydro 2000 Inc
E.L.K Energy Inc
Fort Frances Power Corp
Orangeville Hydro Limited
St. Thomas Energy
Chapleau Public Utilities Corp
PowerStream Corporation
Tillsonburg Hydro
Erie Thames Powerlines
Essex Powerlines
Kenora Hydro
Orillia Power Distribution
Midland Power Utility Corp
Peterborough Distribution
Hydro Ottawa
Horizon Utilities
Wellington North Power
Brantford Power Inc
Kingston Hydro Corporation
Woodstock Hydro Services
Festival Hydro
West Coast Huron Energy
EnWin Utilities
Toronto-Hydro Electric
-
10,000
20,000
30,000
40,000
50,000
60,000
70,000
80,000

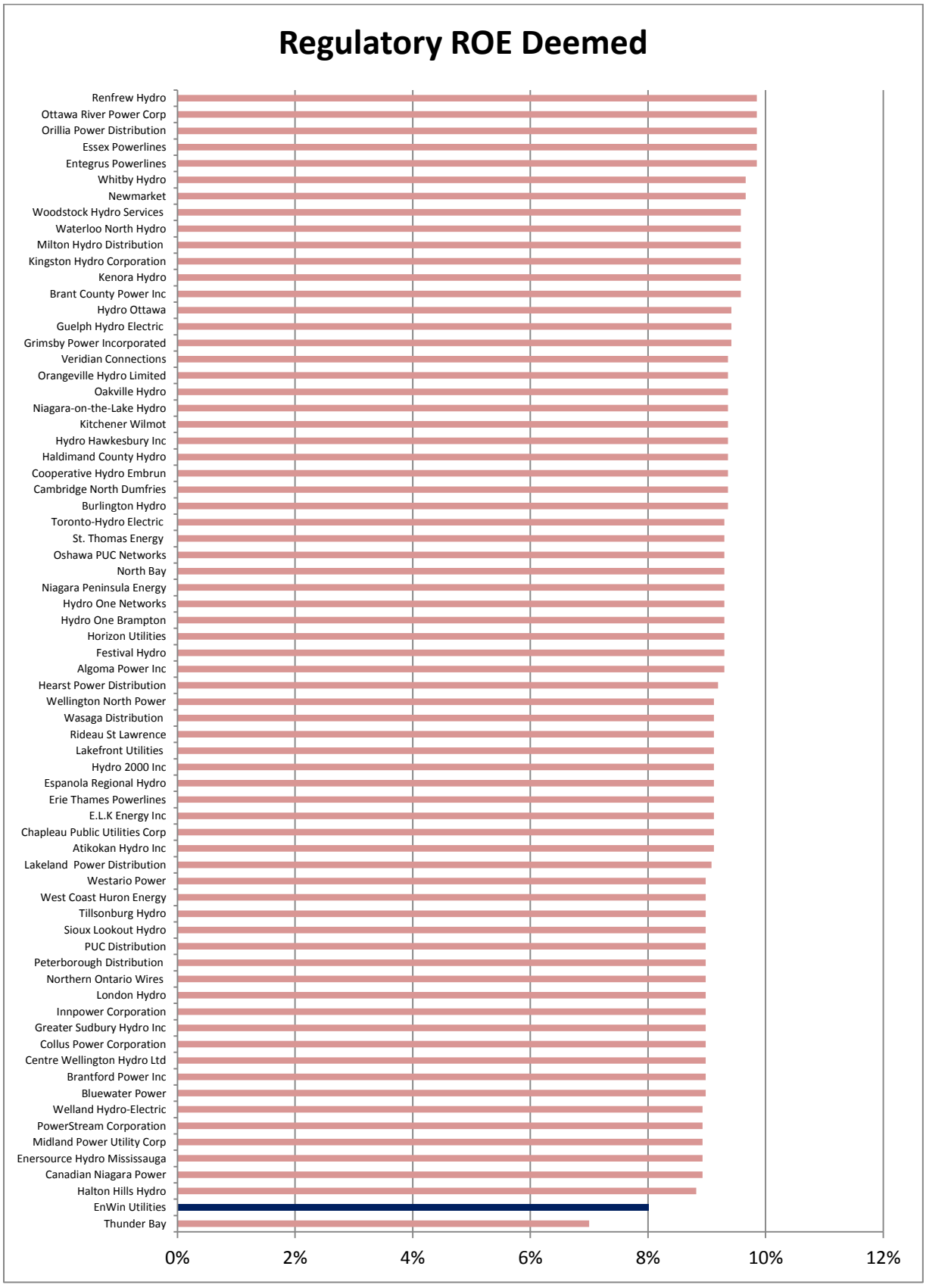

Net Cumulative Energy Savings (% of target)
Entegrus Powerlines
Guelph Hydro Electric
Hearst Power Distribution
Haldimand County Hydro
Wasaga Distribution
Ottawa River Power Corp
Kenora Hydro
Lakeland Power Distribution
Rideau St Lawrence
Midland Power Utility Corp
Chapleau Public Utilities Corp
Grimsby Power Incorporated
Orangeville Hydro Limited
Oakville Hydro
Newmarket
Niagara-on-the-Lake Hydro
Milton Hydro Distribution
Horizon Utilities
North Bay
Espanola Regional Hydro
Kitchener Wilmot
Greater Sudbury Hydro Inc
Woodstock Hydro Services
Erie Thames Powerlines
Westario Power
Lakefront Utilities
Cambridge North Dumfries
Centre Wellington Hydro Ltd
Halton Hills Hydro
Hydro One Networks
PUC Distribution
Niagara Peninsula Energy
Tillsonburg Hydro
Waterloo North Hydro
Hydro Hawkesbury Inc
Sioux Lookout Hydro
London Hydro
Hydro Ottawa
PowerStream Corporation
Innpower Corporation
Festival Hydro
Brantford Power Inc
Algoma Power Inc
Peterborough Distribution
Kingston Hydro Corporation
Burlington Hydro
Toronto-Hydro Electric
Bluewater Power
Enersource Hydro Mississauga
Canadian Niagara Power
St. Thomas Energy
Essex Powerlines
Wellington North Power
Northern Ontario Wires
Hydro One Brampton
Brant County Power Inc
Thunder Bay
Veridian Connections
Whitby Hydro
E.L.K Energy Inc
Orillia Power Distribution
EnWin Utilities
Collus Power Corporation
Atikokan Hydro Inc
Renfrew Hydro
Oshawa PUC Networks
Welland Hydro-Electric
Cooperative Hydro Embrun
Fort Frances Power Corp
Hydro 2000 Inc
0%
10%
20%
30%
40%
50%
60%
70%
80%

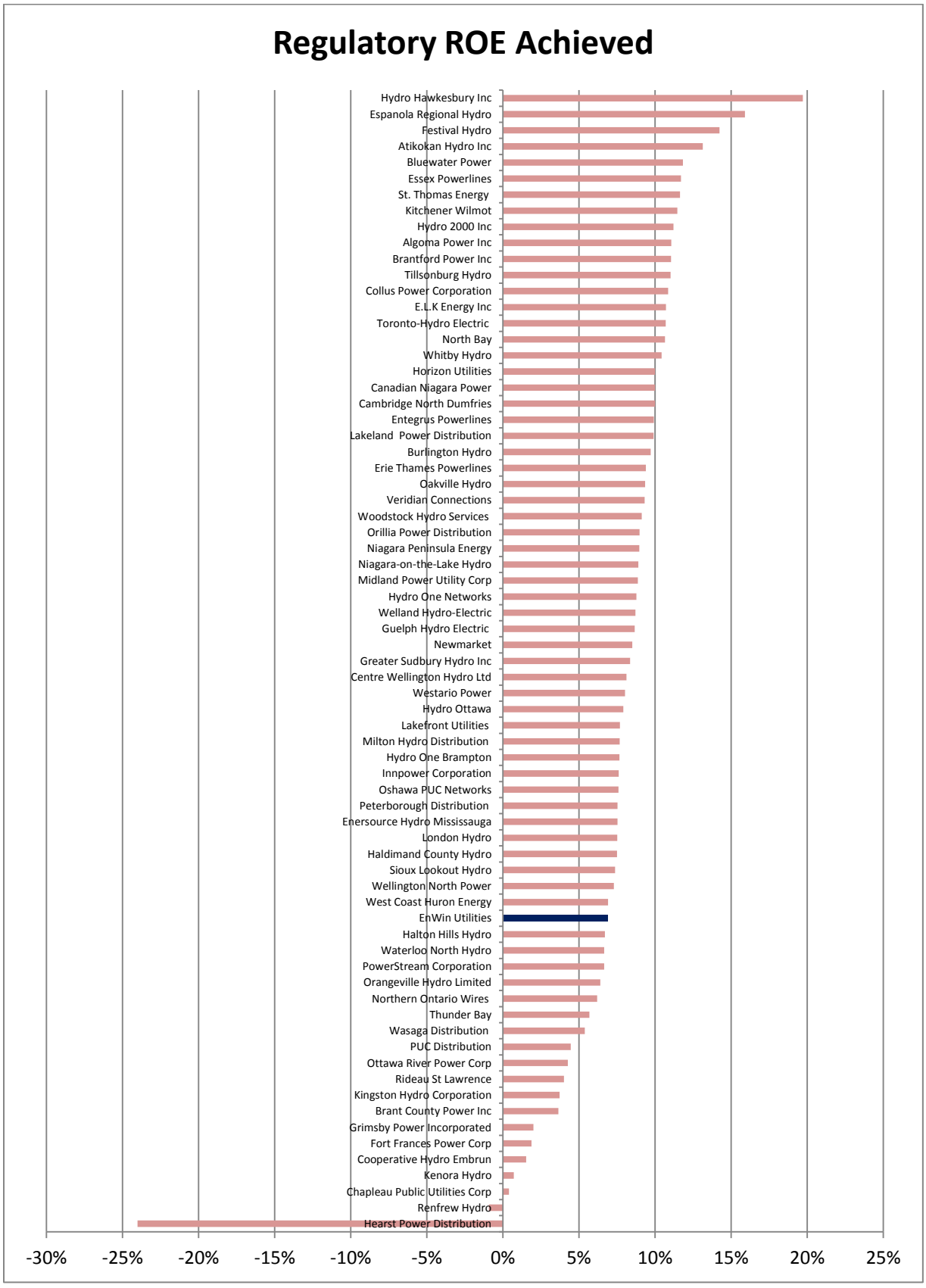

Renewable Generation Connection Impact Assessments Connected On Time
Woodstock Hydro Services
Westario Power
Wasaga Distribution
Veridian Connections
Toronto-Hydro Electric
Thunder Bay
Renfrew Hydro
PowerStream Corporation
Peterborough Distribution
Ottawa River Power Corp
Oshawa PUC Networks
Orillia Power Distribution
Oakville Hydro
Niagara Peninsula Energy
Newmarket
Milton Hydro Distribution
Lakeland Power Distribution
Lakefront Utilities
Kitchener Wilmot
Hydro One Networks
Hydro One Brampton
Halton Hills Hydro
Haldimand County Hydro
Guelph Hydro Electric
Grimsby Power Incorporated
Festival Hydro
Essex Powerlines
Erie Thames Powerlines
EnWin Utilities
Entegrus Powerlines
Enersource Hydro Mississauga
Centre Wellington Hydro Ltd
Cambridge North Dumfries
Burlington Hydro
Brantford Power Inc
Algoma Power Inc
Hydro Ottawa
London Hydro
Waterloo North Hydro
Horizon Utilities
0%
20%
40%
60%
80%
100%
120%

Micro-embedded Generation Connected On Time


Liquidity: Current Ratio
Fort Frances Power Corp
Haldimand County Hydro
Cooperative Hydro Embrun
Newmarket
Woodstock Hydro Services
Wasaga Distribution
Kenora Hydro
Burlington Hydro
Ottawa River Power Corp
Centre Wellington Hydro Ltd
Hearst Power Distribution
Milton Hydro Distribution
Guelph Hydro Electric
Cambridge North Dumfries
E.L.K Energy Inc
North Bay
Chapleau Public Utilities Corp
Brantford Power Inc
Lakefront Utilities
Kitchener Wilmot
Niagara Peninsula Energy
Tillsonburg Hydro
Hydro 2000 Inc
Entegrus Powerlines
Kingston Hydro Corporation
Orangeville Hydro Limited
Thunder Bay
Peterborough Distribution
Westario Power
Oakville Hydro
Welland Hydro-Electric
Espanola Regional Hydro
Renfrew Hydro
Whitby Hydro
Hydro One Brampton
EnWin Utilities
Atikokan Hydro Inc
Collus Power Corporation
Veridian Connections
Northern Ontario Wires
Bluewater Power
Brant County Power Inc
Orillia Power Distribution
London Hydro
Oshawa PUC Networks
Algoma Power Inc
Lakeland Power Distribution
Enersource Hydro Mississauga
St. Thomas Energy
West Coast Huron Energy
Hydro Ottawa
Midland Power Utility Corp
Hydro Hawkesbury Inc
Rideau St Lawrence
Hydro One Networks
Wellington North Power
Halton Hills Hydro
Sioux Lookout Hydro
Waterloo North Hydro
Niagara-on-the-Lake Hydro
PUC Distribution
Essex Powerlines
Horizon Utilities
Erie Thames Powerlines
PowerStream Corporation
Innpower Corporation
Grimsby Power Incorporated
Toronto-Hydro Electric
Greater Sudbury Hydro Inc
Festival Hydro
Canadian Niagara Power
0
1
2
3
4
5
6

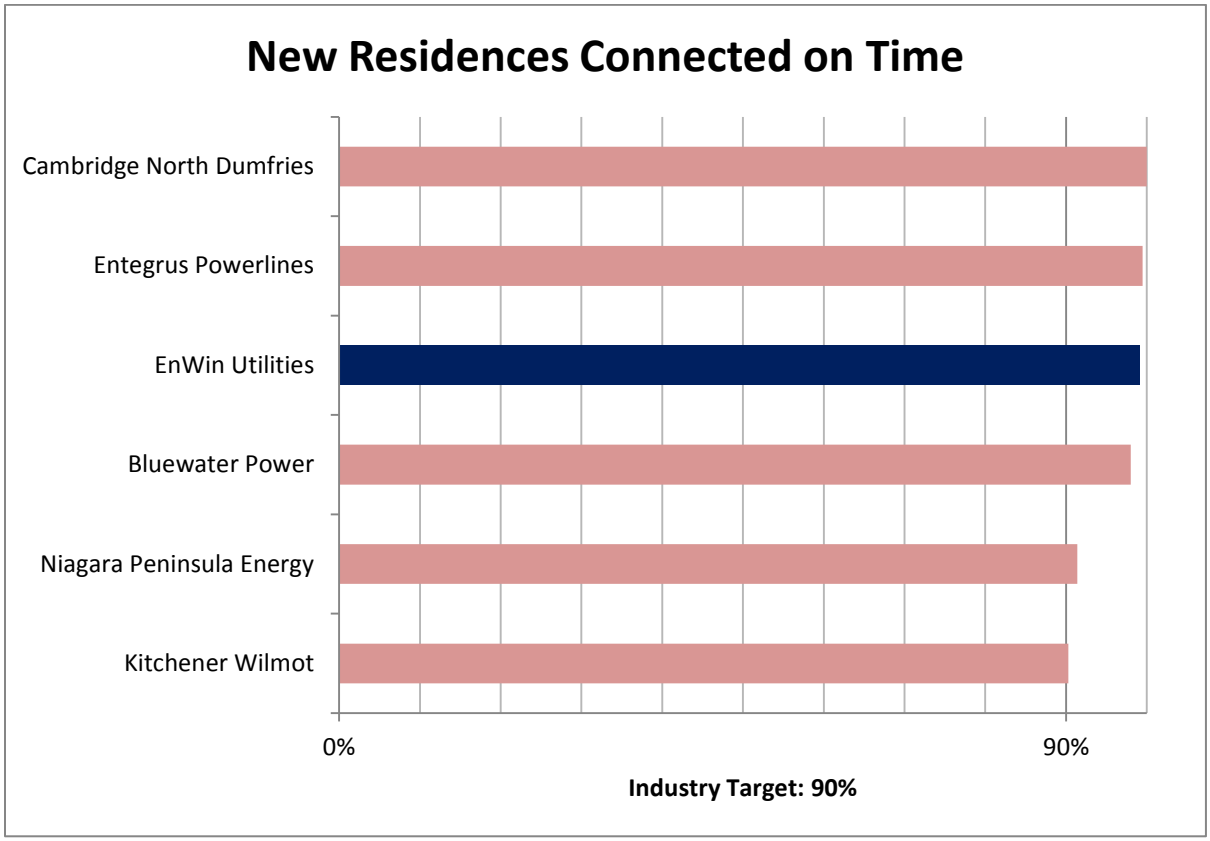

Leverage: Total Debt to Equity
Tillsonburg Hydro
Atikokan Hydro Inc
Lakeland Power Distribution
Wasaga Distribution
Hydro Hawkesbury Inc
Haldimand County Hydro
Hearst Power Distribution
Rideau St Lawrence
EnWin Utilities
Brant County Power Inc
Midland Power Utility Corp
Sioux Lookout Hydro
Kitchener Wilmot
E.L.K Energy Inc
Westario Power
London Hydro
Whitby Hydro
Kenora Hydro
Ottawa River Power Corp
St. Thomas Energy
Niagara-on-the-Lake Hydro
Newmarket
Thunder Bay
Renfrew Hydro
Burlington Hydro
Niagara Peninsula Energy
Welland Hydro-Electric
Bluewater Power
West Coast Huron Energy
North Bay
Horizon Utilities
Essex Powerlines
Hydro One Brampton
Orillia Power Distribution
Brantford Power Inc
Halton Hills Hydro
Oakville Hydro
Lakefront Utilities
Cambridge North Dumfries
Algoma Power Inc
Oshawa PUC Networks
Orangeville Hydro Limited
Centre Wellington Hydro Ltd
Hydro One Networks
Kingston Hydro Corporation
Festival Hydro
Espanola Regional Hydro
Veridian Connections
Waterloo North Hydro
Milton Hydro Distribution
Entegrus Powerlines
Collus Power Corporation
Guelph Hydro Electric
Enersource Hydro Mississauga
PowerStream Corporation
Northern Ontario Wires
Peterborough Distribution
Wellington North Power
Toronto-Hydro Electric
Erie Thames Powerlines
Hydro Ottawa
Canadian Niagara Power
Grimsby Power Incorporated
Woodstock Hydro Services
Innpower Corporation
PUC Distribution
Greater Sudbury Hydro Inc
0
0.5
1
1.5
2
2.5
3
3.5

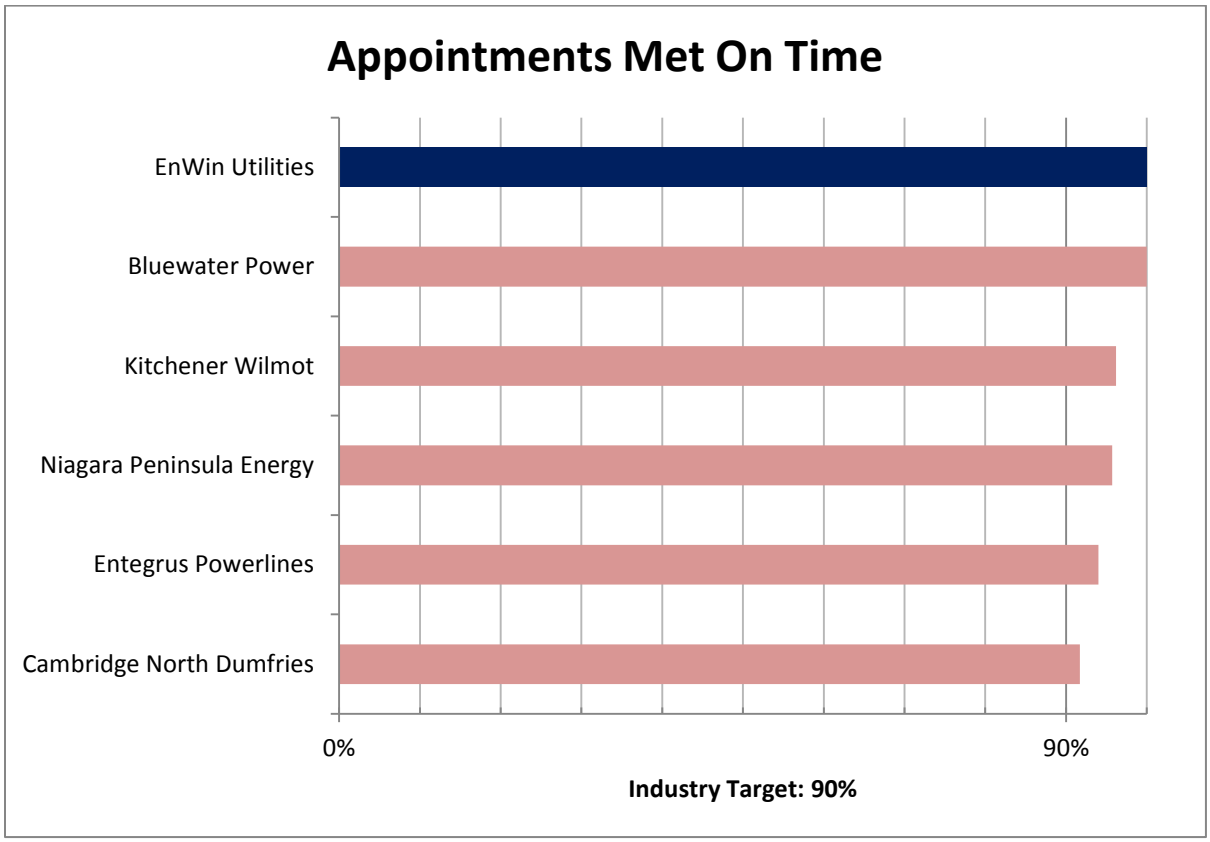

Regulatory ROE Deemed
Renfrew Hydro
Ottawa River Power Corp
Orillia Power Distribution
Essex Powerlines
Entegrus Powerlines
Whitby Hydro
Newmarket
Woodstock Hydro Services
Waterloo North Hydro
Milton Hydro Distribution
Kingston Hydro Corporation
Kenora Hydro
Brant County Power Inc
Hydro Ottawa
Guelph Hydro Electric
Grimsby Power Incorporated
Veridian Connections
Orangeville Hydro Limited
Oakville Hydro
Niagara-on-the-Lake Hydro
Kitchener Wilmot
Hydro Hawkesbury Inc
Haldimand County Hydro
Cooperative Hydro Embrun
Cambridge North Dumfries
Burlington Hydro
Toronto-Hydro Electric
St. Thomas Energy
Oshawa PUC Networks
North Bay
Niagara Peninsula Energy
Hydro One Networks
Hydro One Brampton
Horizon Utilities
Festival Hydro
Algoma Power Inc
Hearst Power Distribution
Wellington North Power
Wasaga Distribution
Rideau St Lawrence
Lakefront Utilities
Hydro 2000 Inc
Espanola Regional Hydro
Erie Thames Powerlines
E.L.K Energy Inc
Chapleau Public Utilities Corp
Atikokan Hydro Inc
Lakeland Power Distribution
Westario Power
West Coast Huron Energy
Tillsonburg Hydro
Sioux Lookout Hydro
PUC Distribution
Peterborough Distribution
Northern Ontario Wires
London Hydro
Innpower Corporation
Greater Sudbury Hydro Inc
Collus Power Corporation
Centre Wellington Hydro Ltd
Brantford Power Inc
Bluewater Power
Welland Hydro-Electric
PowerStream Corporation
Midland Power Utility Corp
Enersource Hydro Mississauga
Canadian Niagara Power
Halton Hills Hydro
EnWin Utilities
Thunder Bay
0%
2%
4%
6%
8%
10%
12%

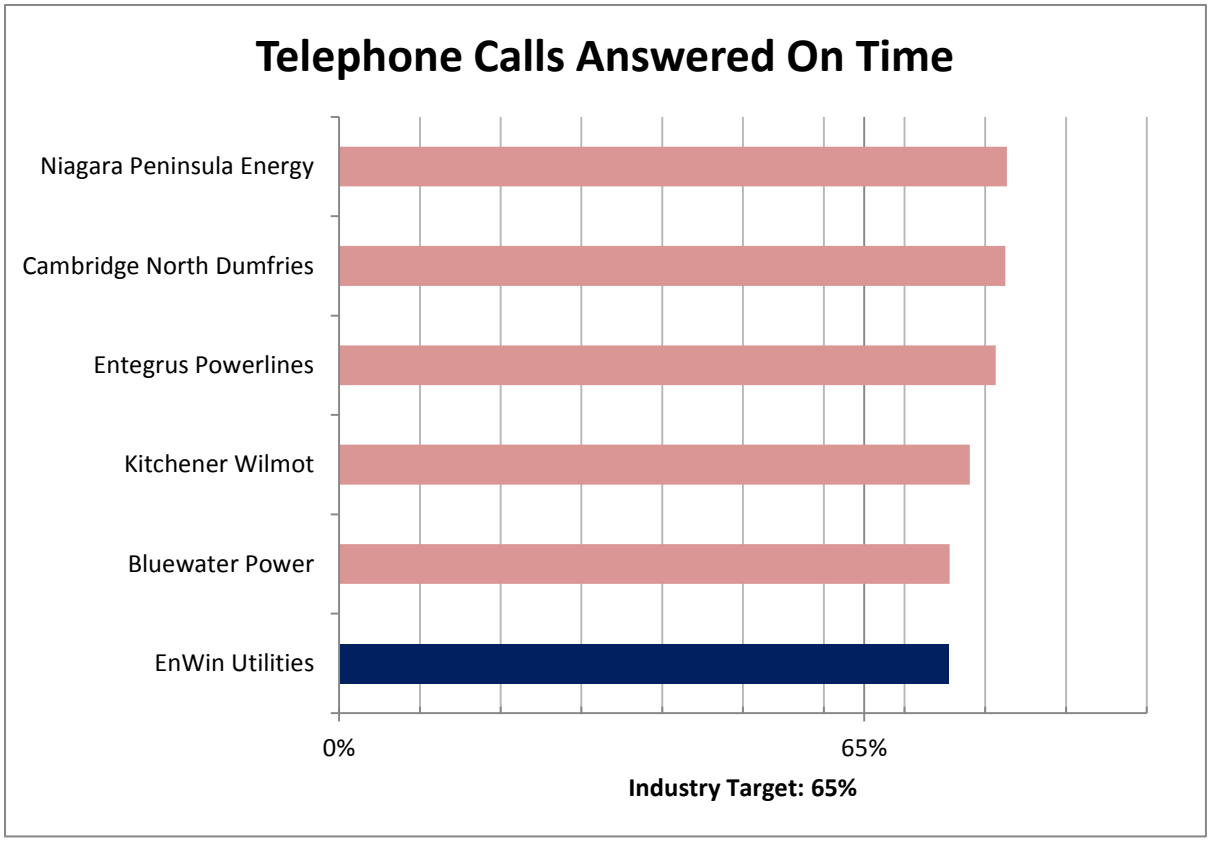

Regulatory ROE Achieved
Hydro Hawkesbury Inc
Espanola Regional Hydro
Festival Hydro
Atikokan Hydro Inc
Bluewater Power
Essex Powerlines
St. Thomas Energy
Kitchener Wilmot
Hydro 2000 Inc
Algoma Power Inc
Brantford Power Inc
Tillsonburg Hydro
Collus Power Corporation
E.L.K Energy Inc
Toronto-Hydro Electric
North Bay
Whitby Hydro
Horizon Utilities
Canadian Niagara Power
Cambridge North Dumfries
Entegrus Powerlines
Lakeland Power Distribution
Burlington Hydro
Erie Thames Powerlines
Oakville Hydro
Veridian Connections
Woodstock Hydro Services
Orillia Power Distribution
Niagara Peninsula Energy
Niagara-on-the-Lake Hydro
Midland Power Utility Corp
Hydro One Networks
Welland Hydro-Electric
Guelph Hydro Electric
Newmarket
Greater Sudbury Hydro Inc
Centre Wellington Hydro Ltd
Westario Power
Hydro Ottawa
Lakefront Utilities
Milton Hydro Distribution
Hydro One Brampton
Innpower Corporation
Oshawa PUC Networks
Peterborough Distribution
Enersource Hydro Mississauga
London Hydro
Haldimand County Hydro
Sioux Lookout Hydro
Wellington North Power
West Coast Huron Energy
EnWin Utilities
Halton Hills Hydro
Waterloo North Hydro
PowerStream Corporation
Orangeville Hydro Limited
Northern Ontario Wires
Thunder Bay
Wasaga Distribution
PUC Distribution
Ottawa River Power Corp
Rideau St Lawrence
Kingston Hydro Corporation
Brant County Power Inc
Grimsby Power Incorporated
Fort Frances Power Corp
Cooperative Hydro Embrun
Kenora Hydro
Chapleau Public Utilities Corp
Renfrew Hydro
Hearst Power Distribution
-30%
-25%
-20%
-15%
-10%
-5%
0%
5%
10%
15%
20%
25%

3 TABLES COMPARING SIMILAR CUSTOMER COUNT LDCS

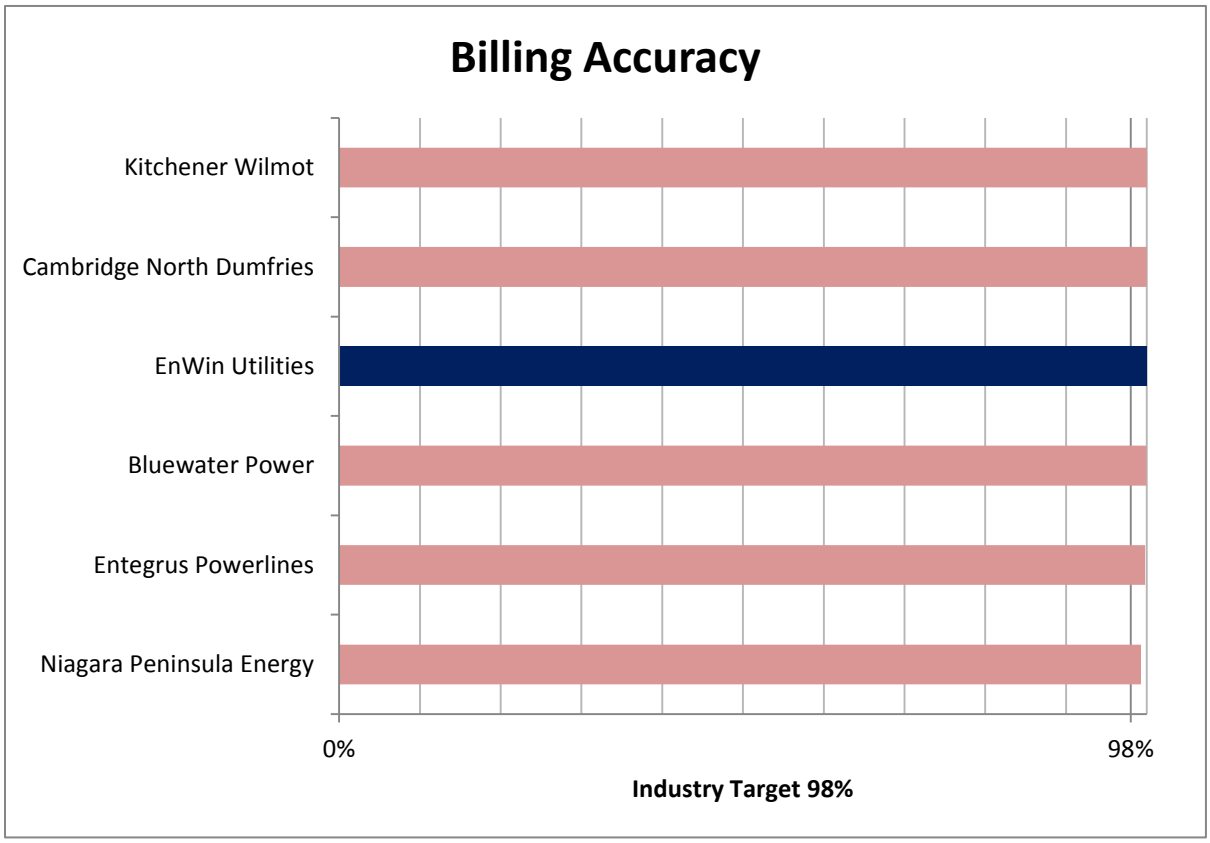
EnWin Utilities was compared to the following LDCs which have a similar number of customers: Entegrus Powerlines, Bluewater Power, Niagara Peninsula Energy, Kitchener Wilmot, and Cambridge North Dumfries.

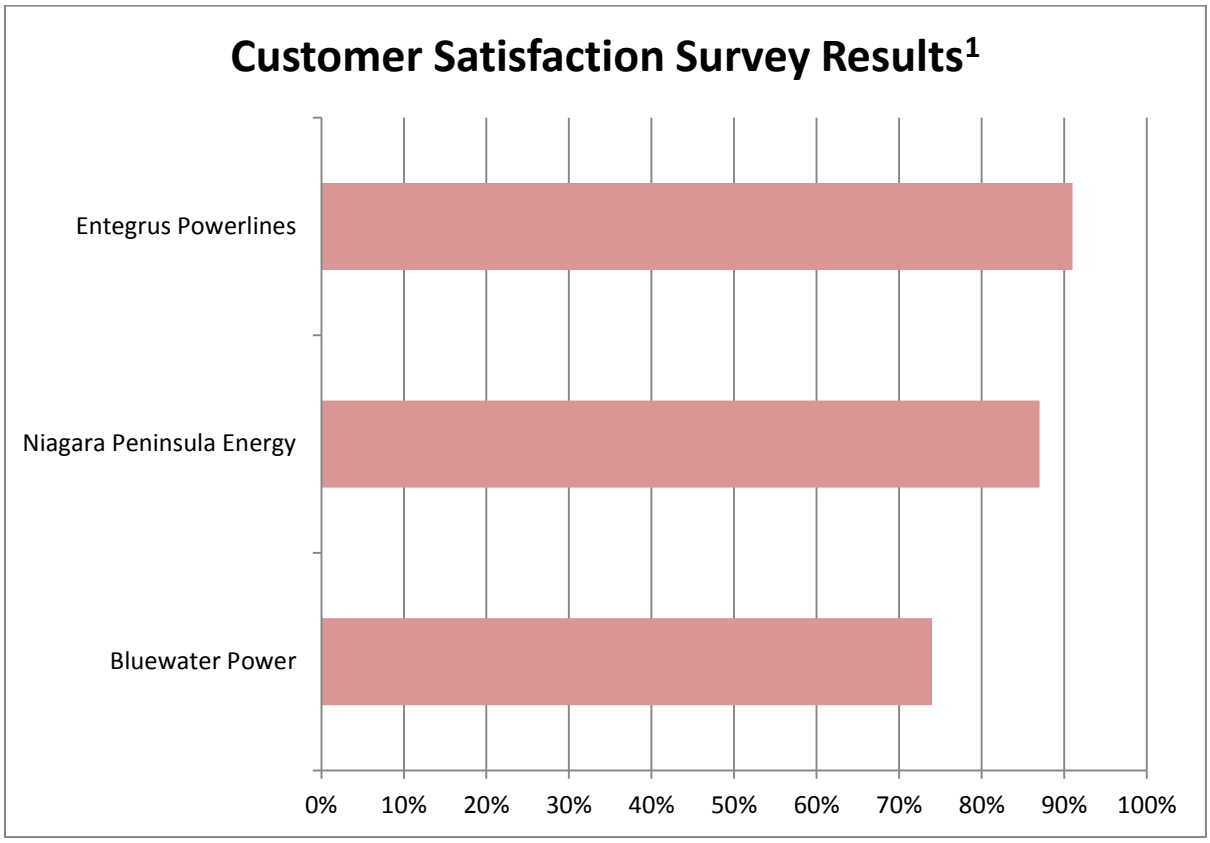



Appointments Met On Time
EnWin Utilities
Bluewater Power
Kitchener Wilmot
Niagara Peninsula Energy
Entegrus Powerlines
Cambridge North Dumfries
0%
90%
Industry Target: 90%


Telephone Calls Answered On Time
Niagara Peninsula Energy
Cambridge North Dumfries
Entegrus Powerlines
Kitchener Wilmot
Bluewater Power
EnWin Utilities
0%
65%
Industry Target: 65%

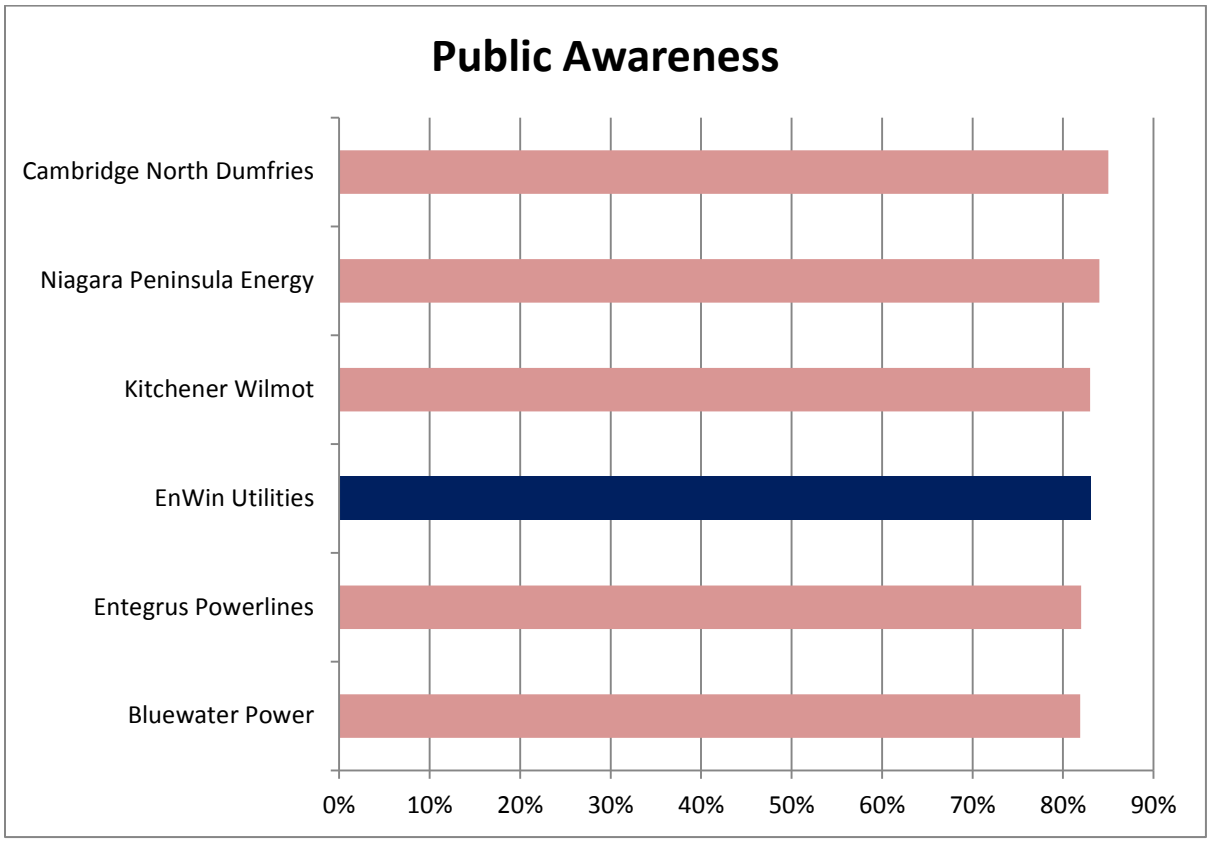

First Contact Resolution
Cambridge North Dumfries
Bluewater Power
Kitchener Wilmot
EnWin Utilities
Niagara Peninsula Energy
Entegrus Powerlines
-
0.20
0.40
0.60
0.80
1.00
1.20

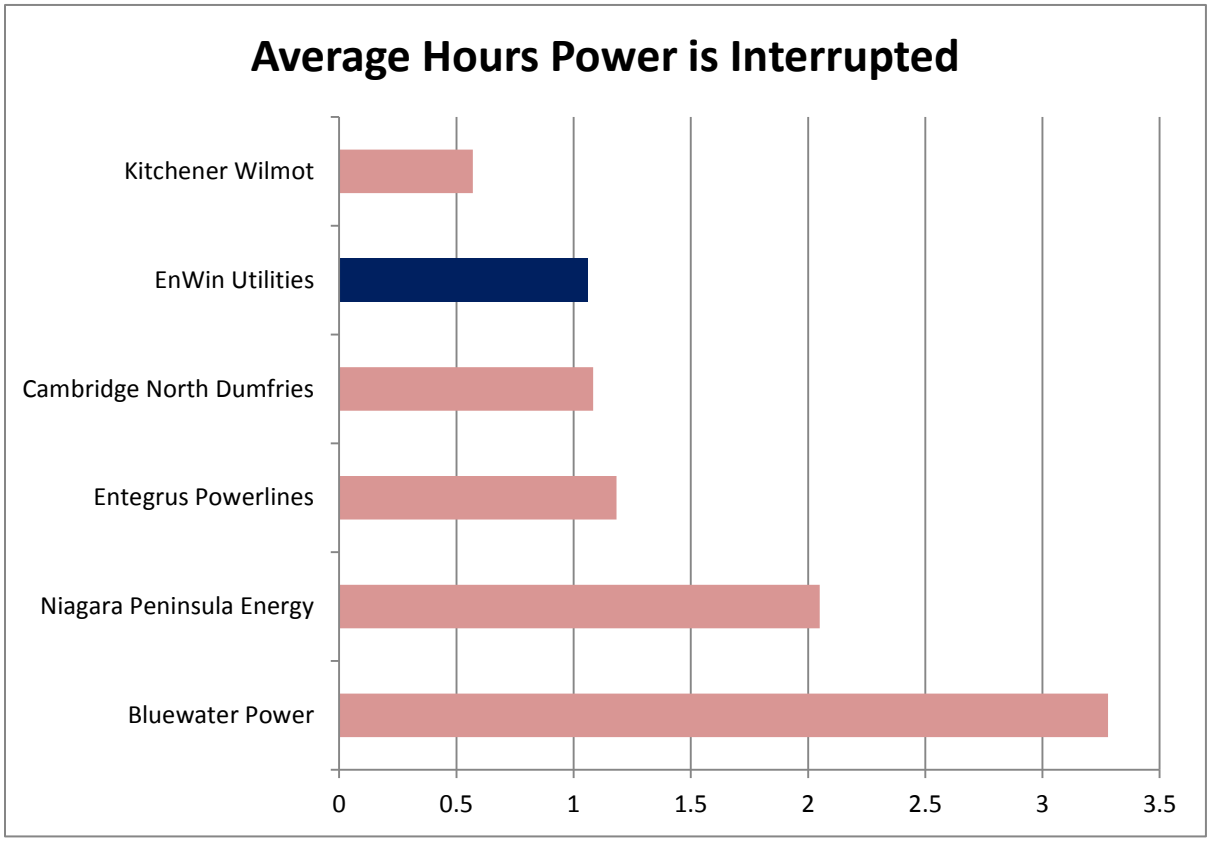

Billing Accuracy
Kitchener Wilmot
Cambridge North Dumfries
EnWin Utilities
Bluewater Power
Entegrus Powerlines
Niagara Peninsula Energy
0%
98%
Industry Target 98%

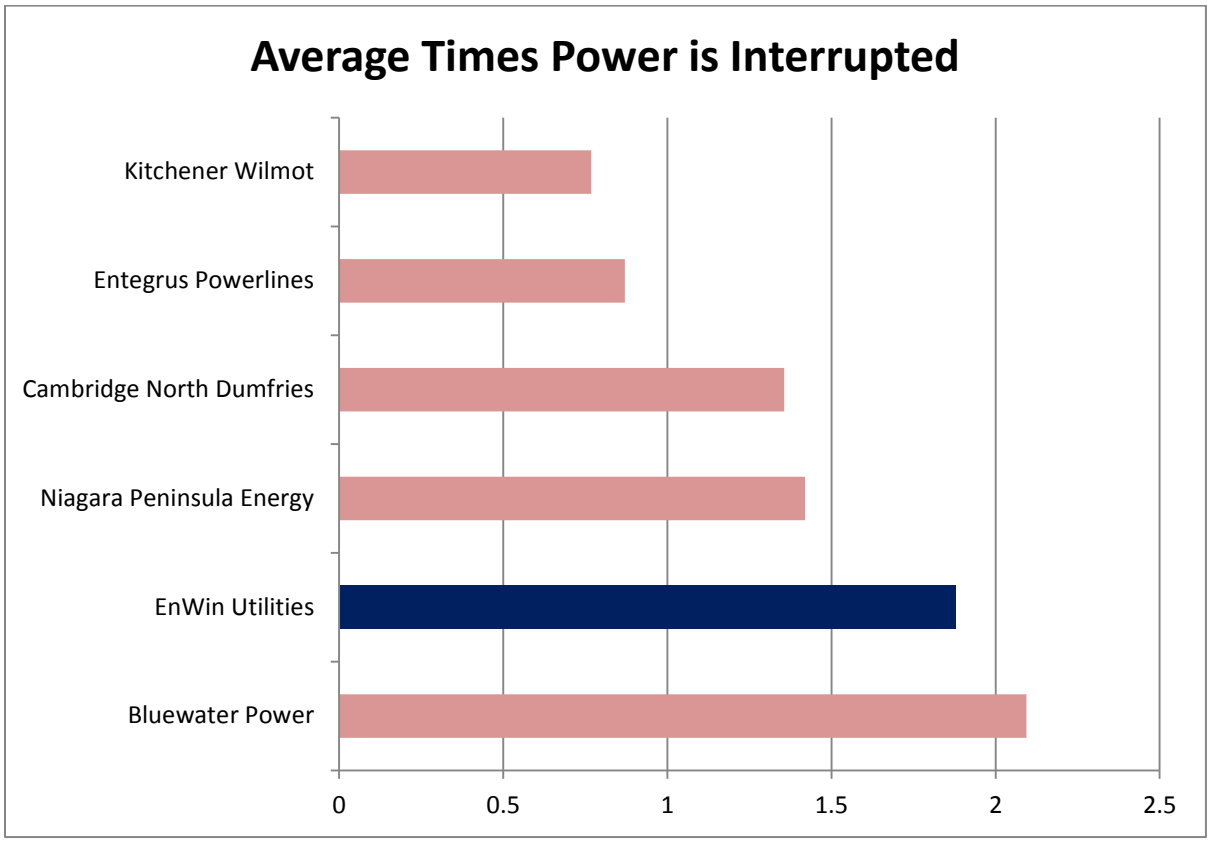


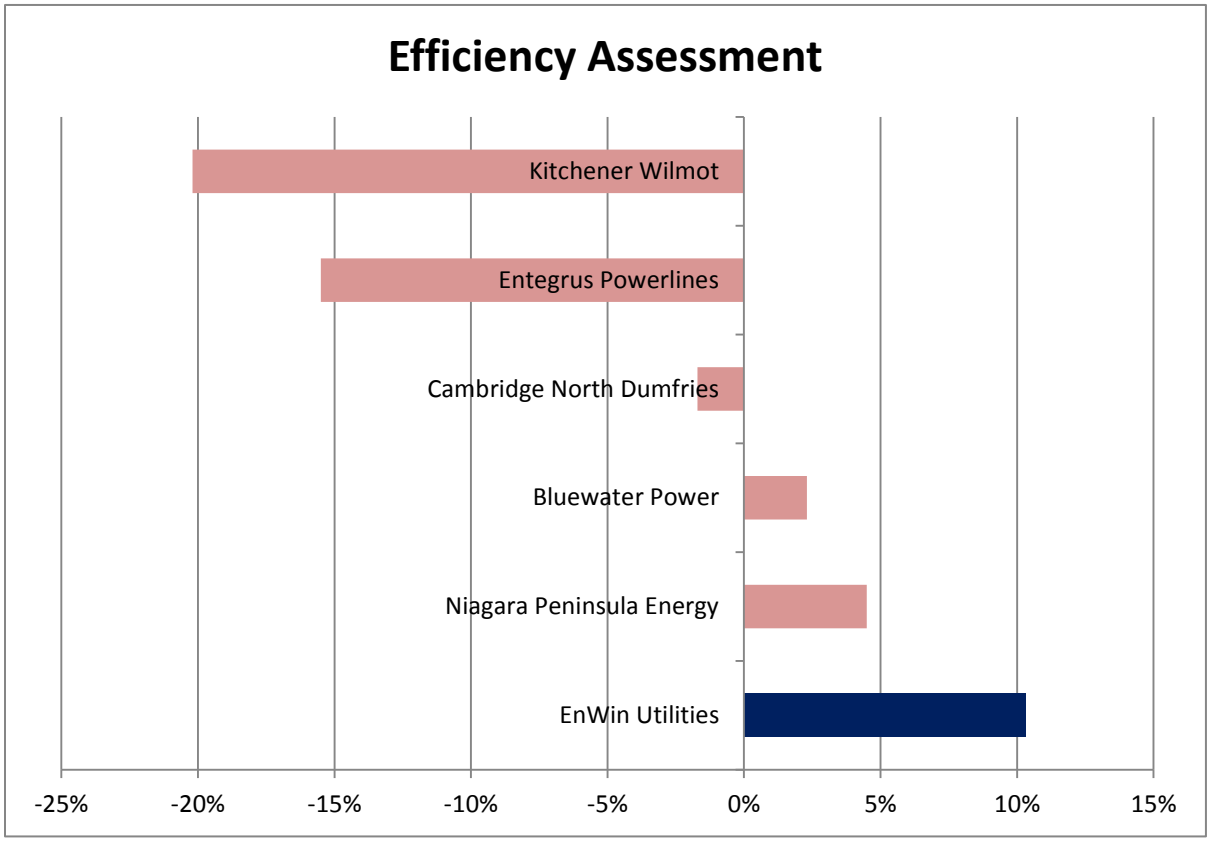
Note:

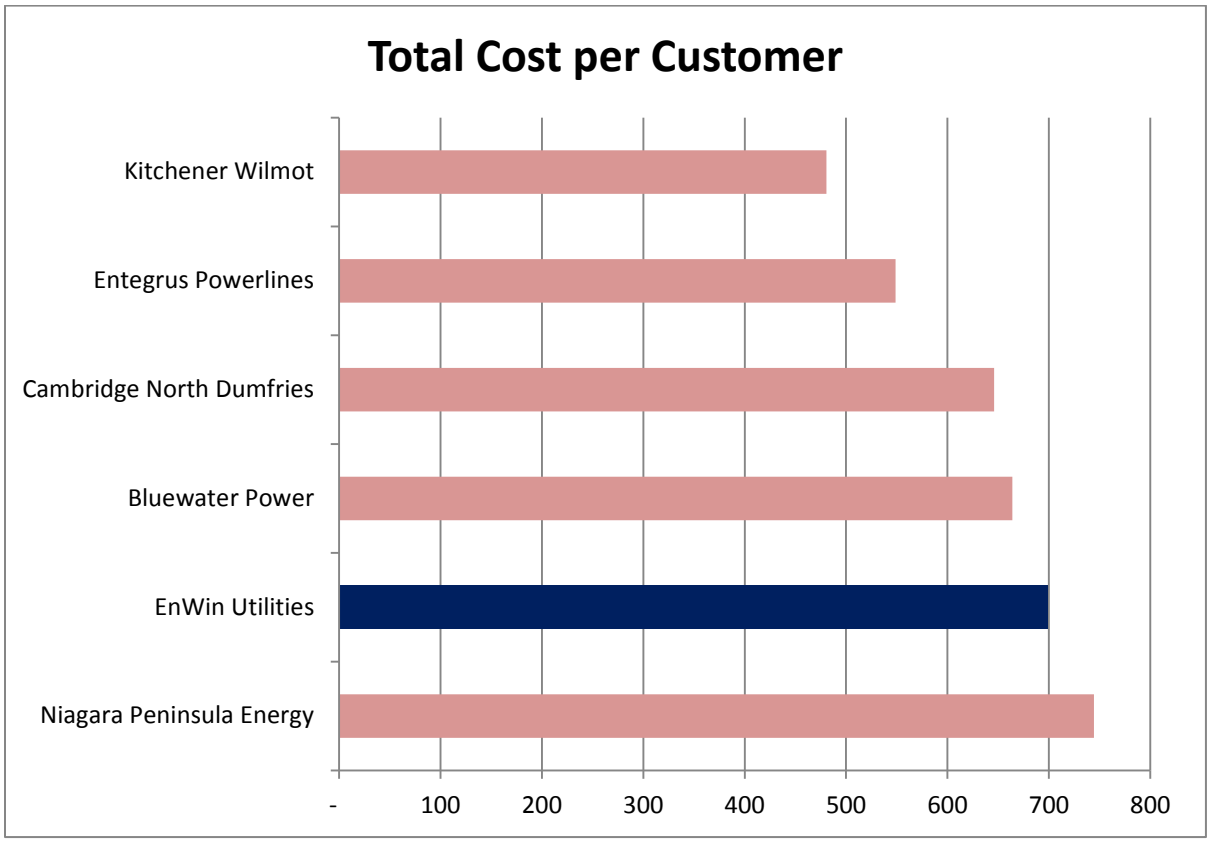
1. Customer Satisfaction Survey Results for Cambridge North Dumfries and Kitchener Wilmot are "A" and EnWin Utilities is "Good".

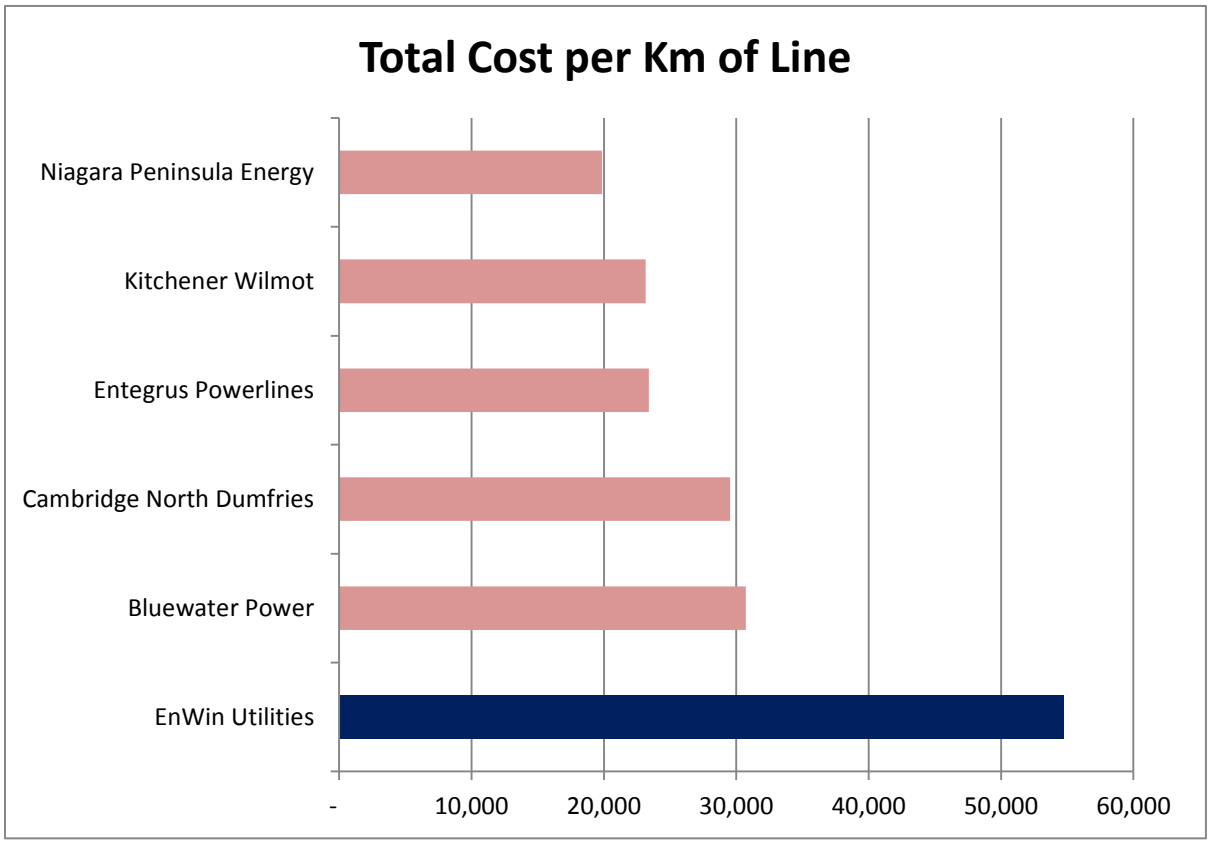

Public Awareness
Cambridge North Dumfries
Niagara Peninsula Energy
Kitchener Wilmot
EnWin Utilities
Entegrus Powerlines
Bluewater Power
0%
10%
20%
30%
40%
50%
60%
70%
80%
90%

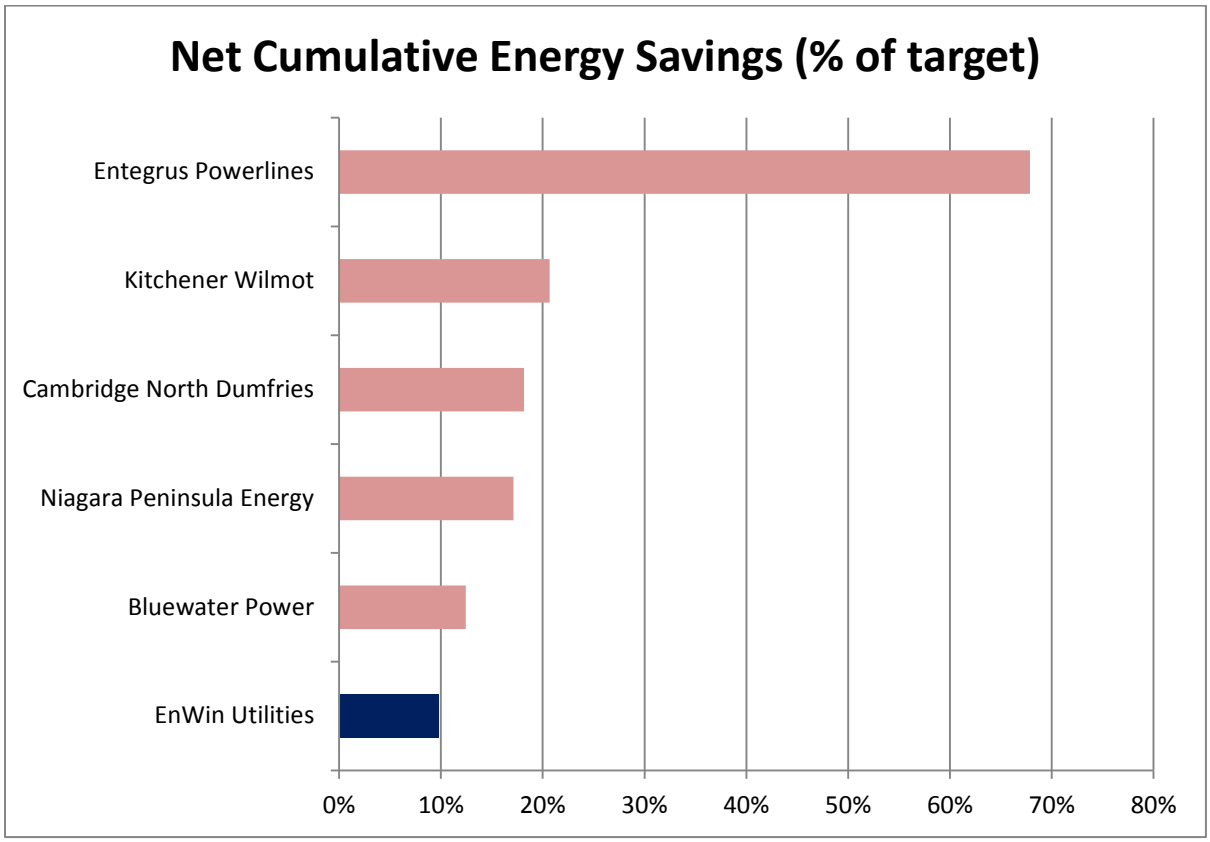

Average Hours Power is Interrupted
Kitchener Wilmot
EnWin Utilities
Cambridge North Dumfries
Entegrus Powerlines
Niagara Peninsula Energy
Bluewater Power
0
0.5
1
1.5
2
2.5
3
3.5

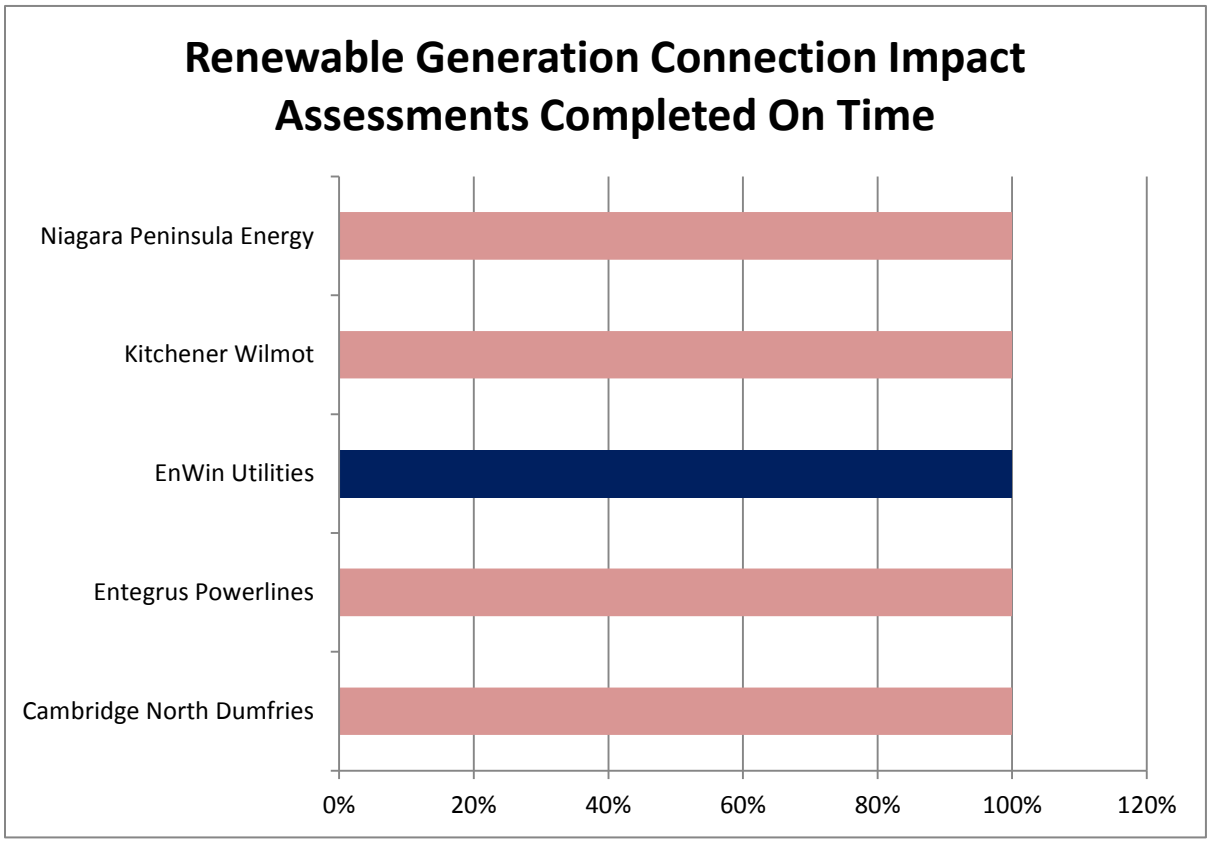

Average Times Power is Interrupted
Kitchener Wilmot
Entegrus Powerlines
Cambridge North Dumfries
Niagara Peninsula Energy
EnWin Utilities
Bluewater Power
0
0.5
1
1.5
2
2.5

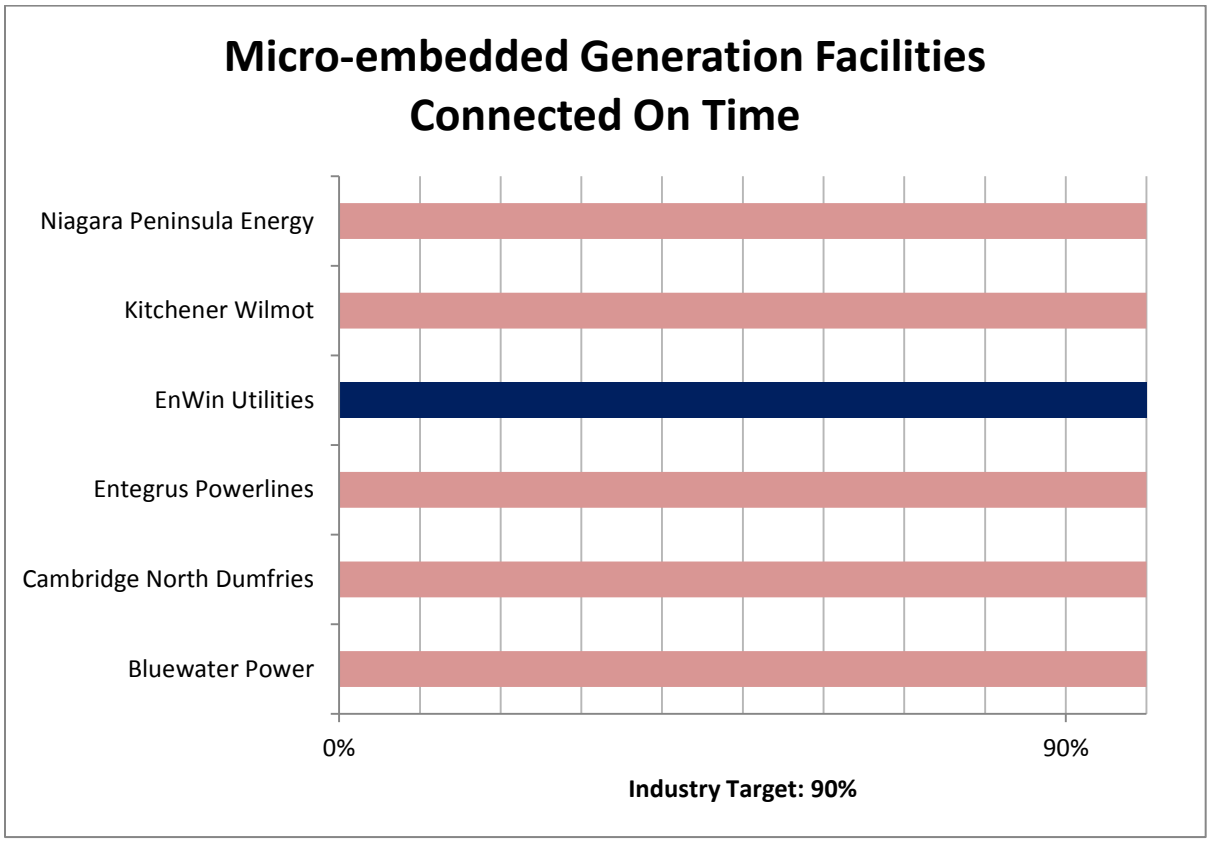

Efficiency Assessment
Kitchener Wilmot
Entegrus Powerlines
Cambridge North Dumfries
Bluewater Power
Niagara Peninsula Energy
EnWin Utilities
-25%
-20%
-15%
-10%
-5%
0%
5%
10%
15%

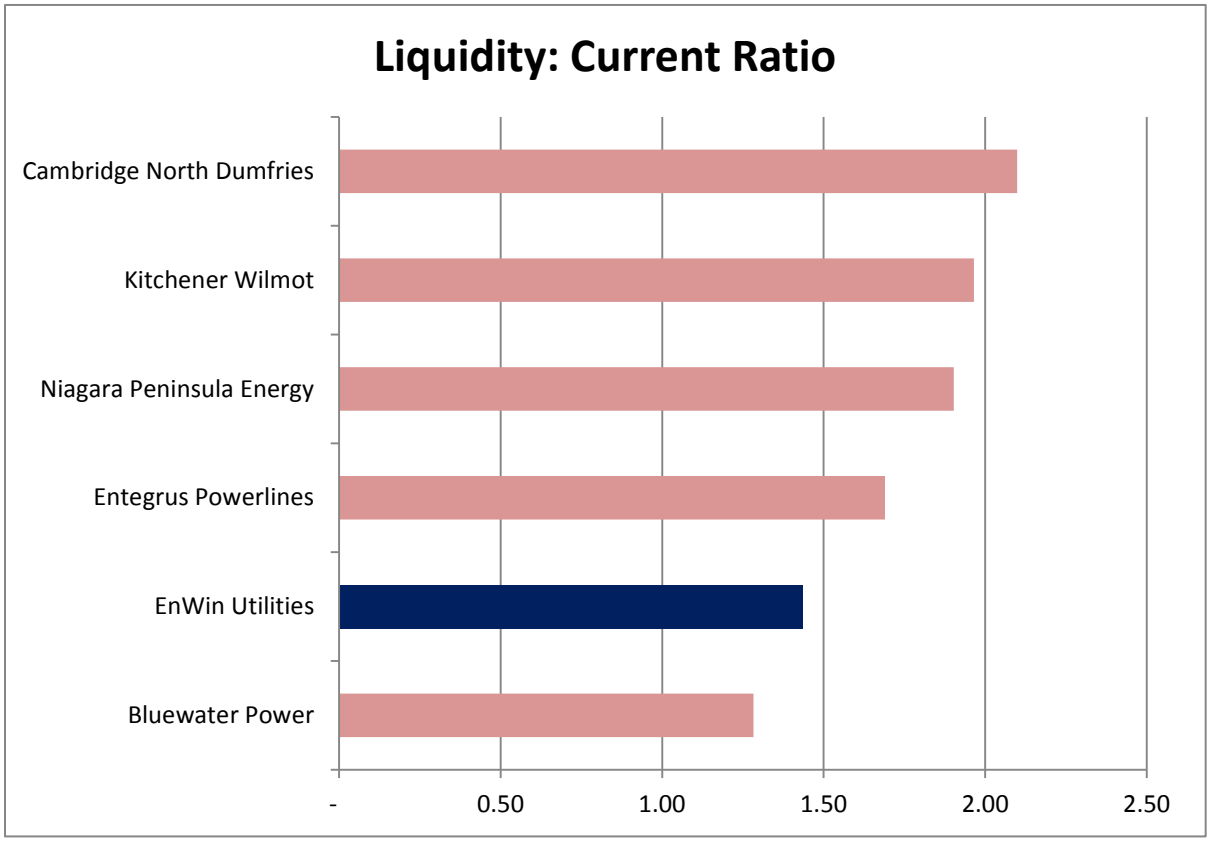

Total Cost per Customer
Kitchener Wilmot
Entegrus Powerlines
Cambridge North Dumfries
Bluewater Power
EnWin Utilities
Niagara Peninsula Energy
-
100
200
300
400
500
600
700
800

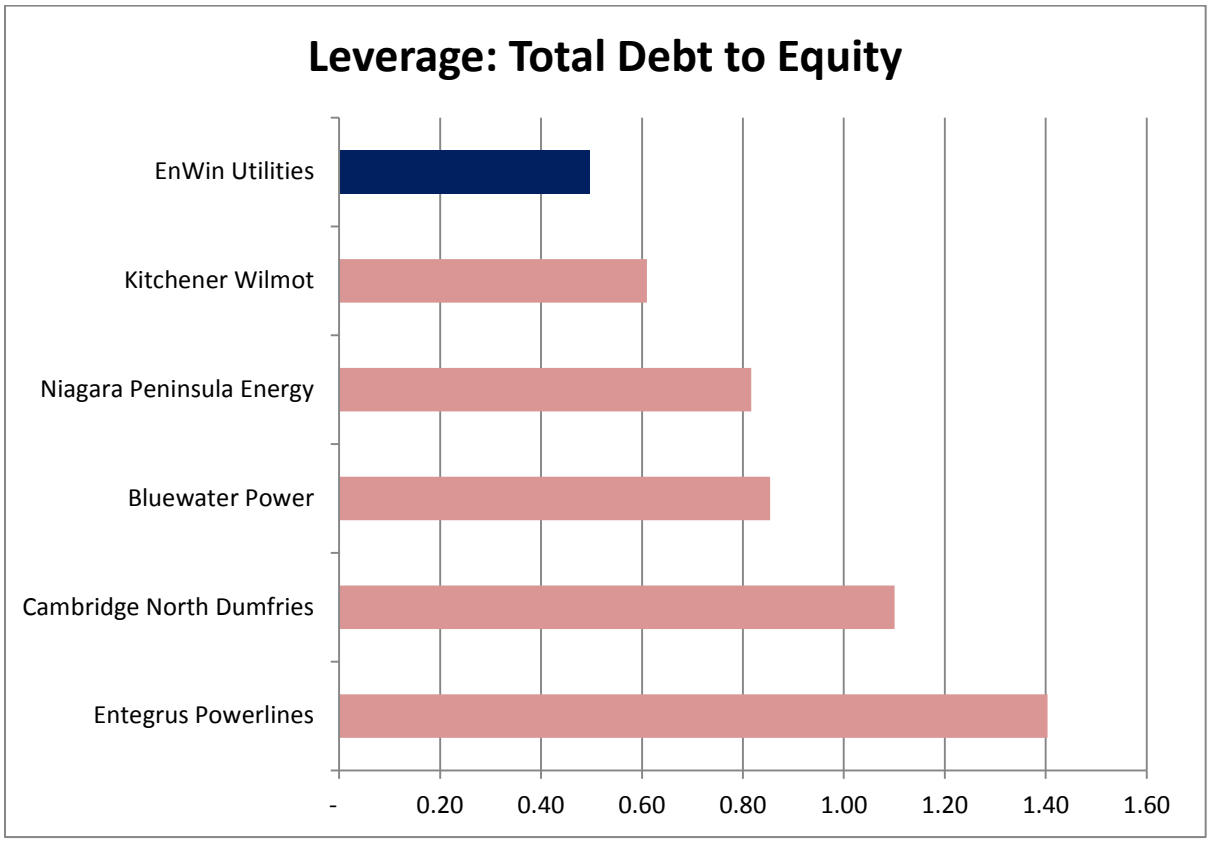

Total Cost per Km of Line
Niagara Peninsula Energy
Kitchener Wilmot
Entegrus Powerlines
Cambridge North Dumfries
Bluewater Power
EnWin Utilities
-
10,000
20,000
30,000
40,000
50,000
60,000

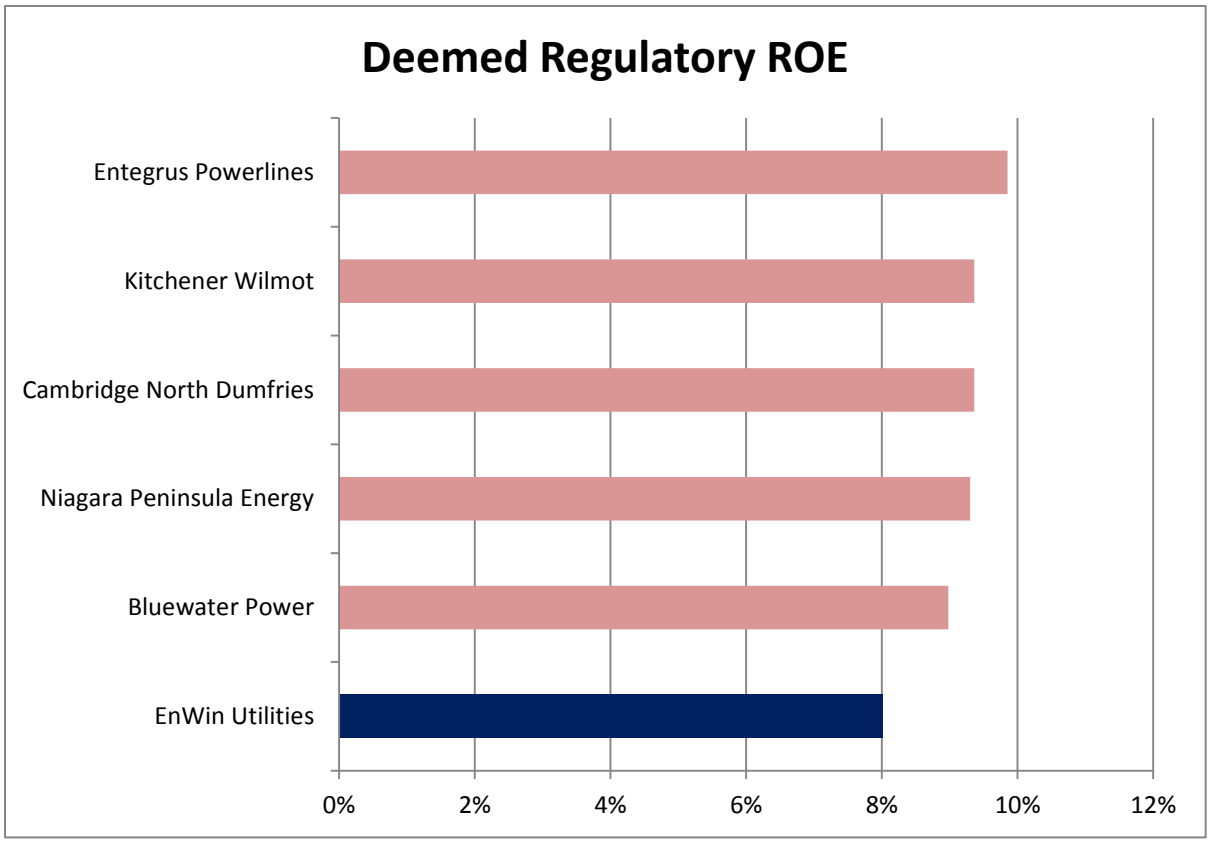

Net Cumulative Energy Savings (% of target)
Entegrus Powerlines
Kitchener Wilmot
Cambridge North Dumfries
Niagara Peninsula Energy
Bluewater Power
EnWin Utilities
0%
10%
20%
30%
40%
50%
60%
70%
80%

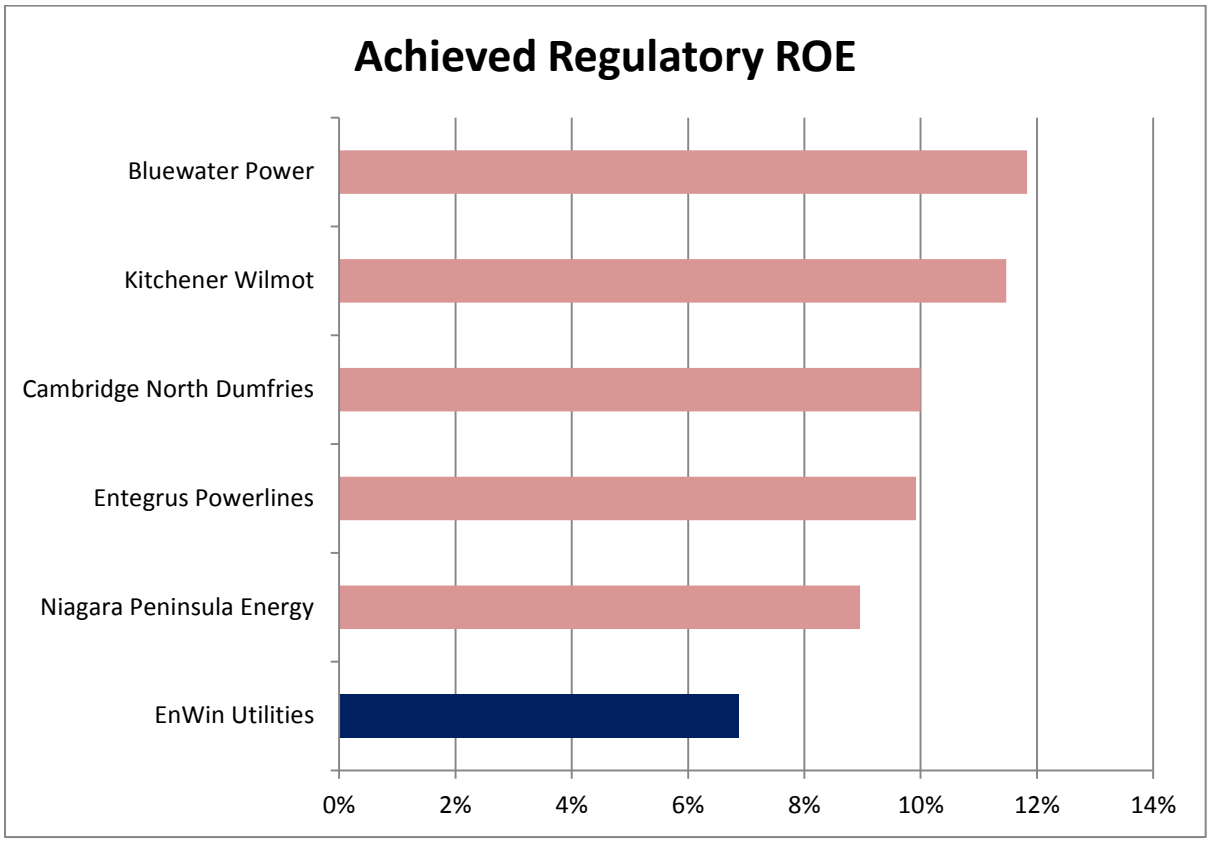

Renewable Generation Connection Impact Assessments Completed On Time
Niagara Peninsula Energy
Kitchener Wilmot
EnWin Utilities
Entegrus Powerlines
Cambridge North Dumfries
0%
20%
40%
60%
80%
100%
120%


Micro-embedded Generation Facilities Connected On Time
Niagara Peninsula Energy
Kitchener Wilmot
EnWin Utilities
Entegrus Powerlines
Cambridge North Dumfries
Bluewater Power
0%
90%
Industry Target: 90%


Liquidity: Current Ratio
Cambridge North Dumfries
Kitchener Wilmot
Niagara Peninsula Energy
Entegrus Powerlines
EnWin Utilities
Bluewater Power
-
0.50
1.00
1.50
2.00
2.50

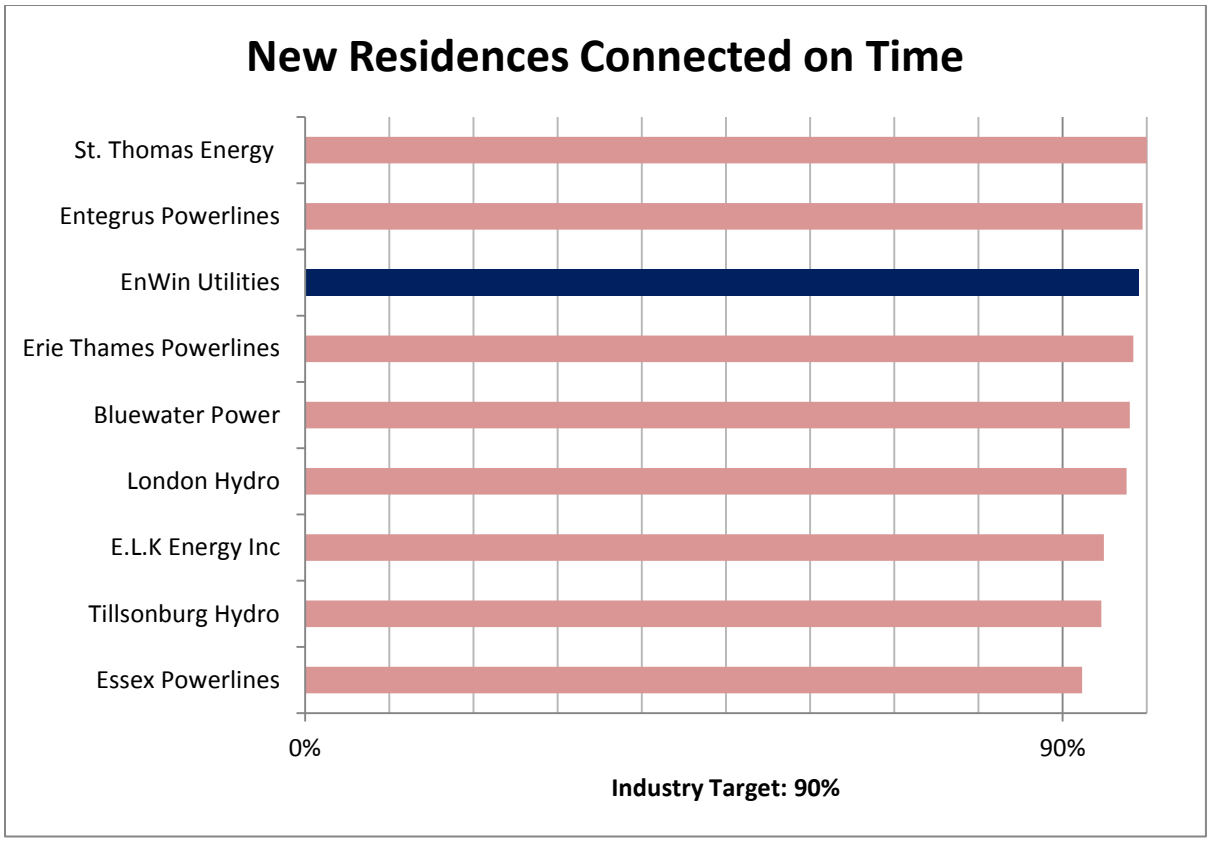

Leverage: Total Debt to Equity
EnWin Utilities
Kitchener Wilmot
Niagara Peninsula Energy
Bluewater Power
Cambridge North Dumfries
Entegrus Powerlines
-
0.20
0.40
0.60
0.80
1.00
1.20
1.40
1.60

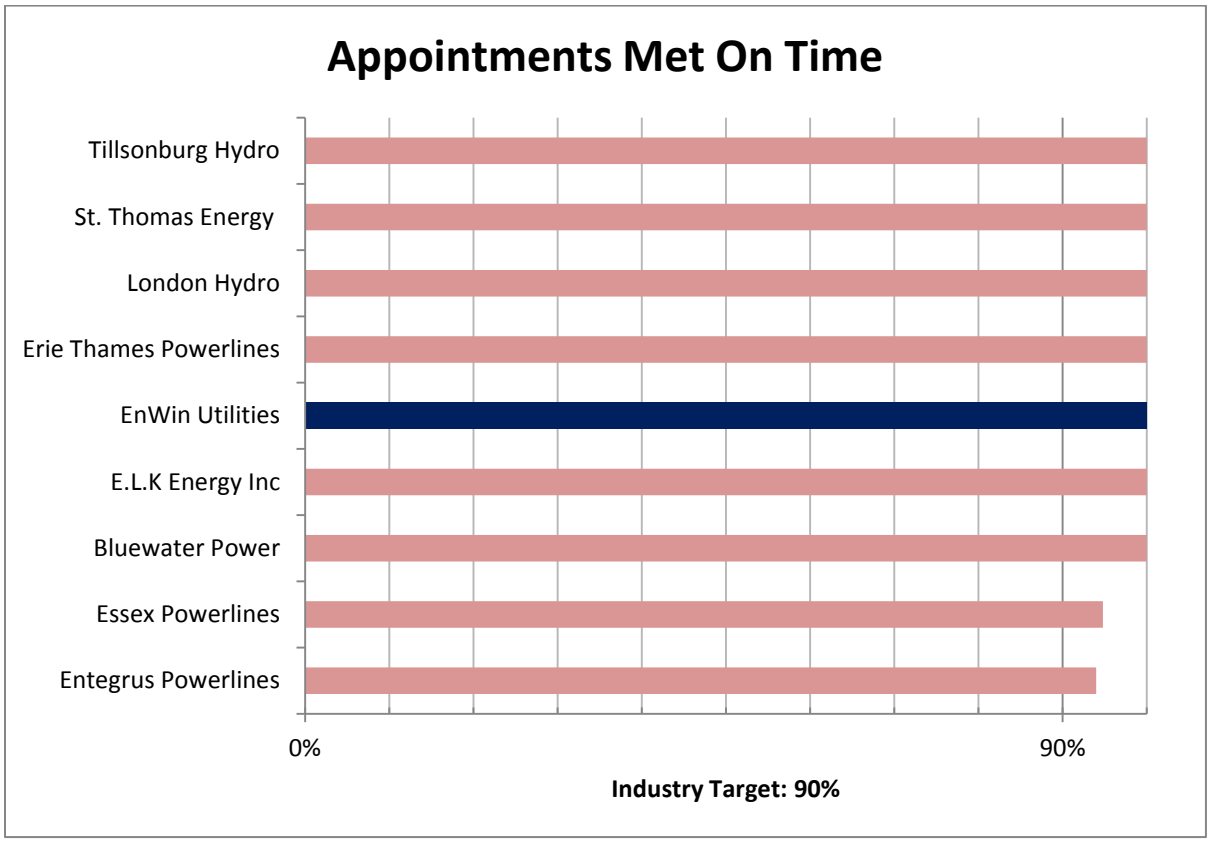

Deemed Regulatory ROE
Entegrus Powerlines
Kitchener Wilmot
Cambridge North Dumfries
Niagara Peninsula Energy
Bluewater Power
EnWin Utilities
0%
2%
4%
6%
8%
10%
12%

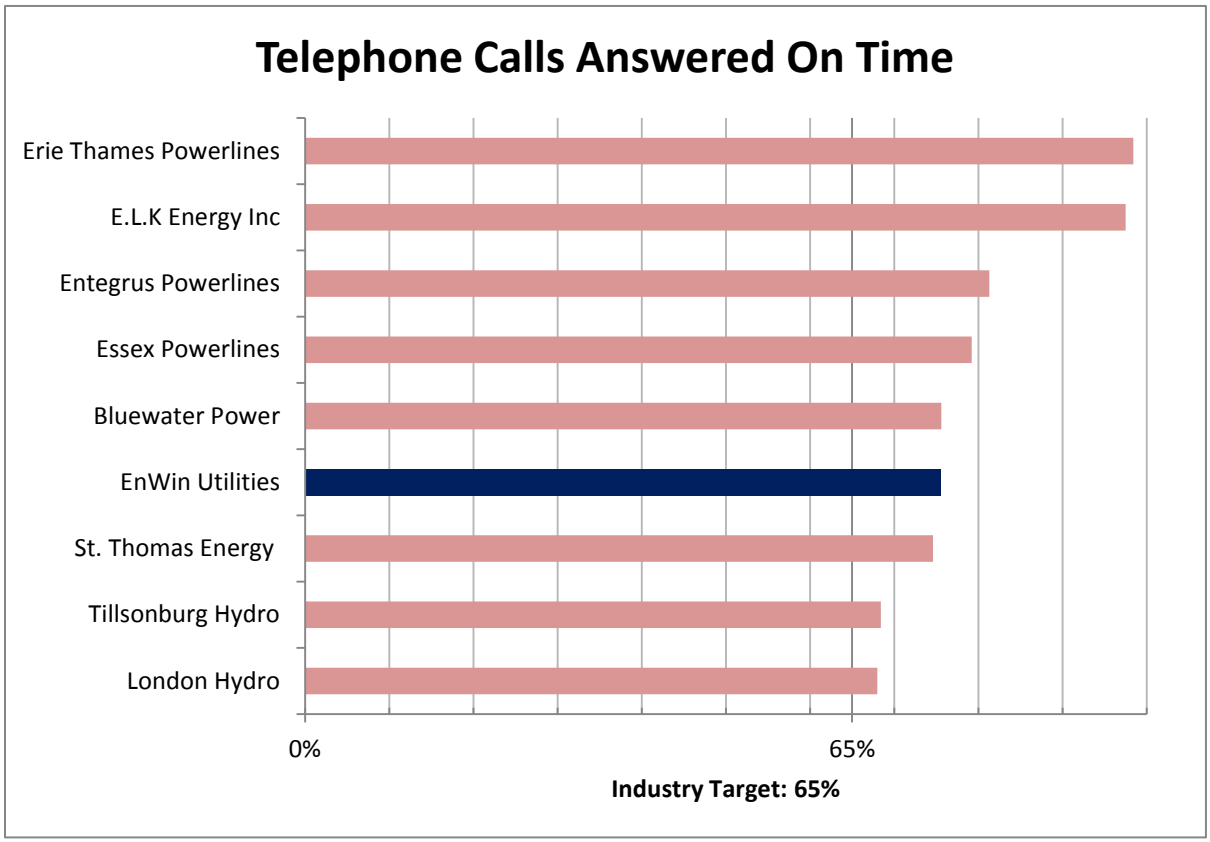

Achieved Regulatory ROE
Bluewater Power
Kitchener Wilmot
Cambridge North Dumfries
Entegrus Powerlines
Niagara Peninsula Energy
EnWin Utilities
0%
2%
4%
6%
8%
10%
12%
14%

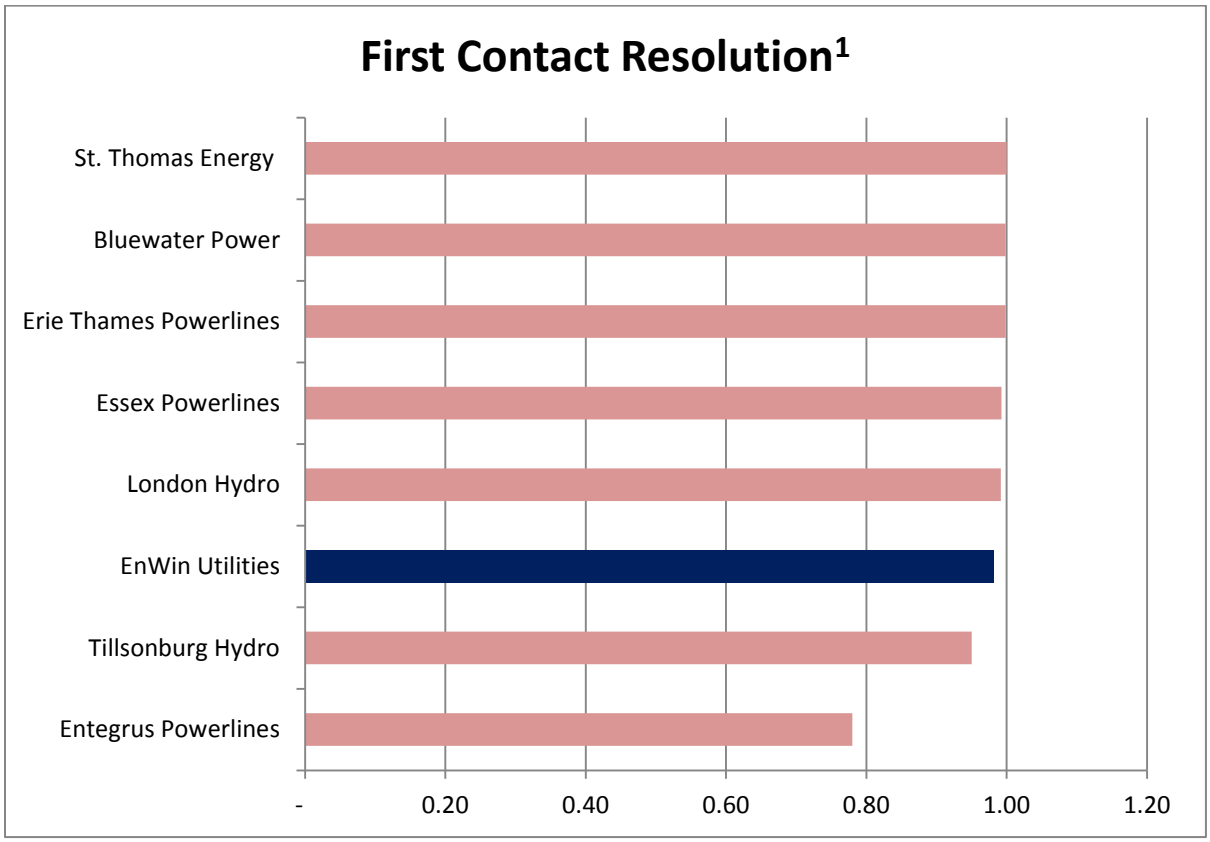
4 TABLES COMPARING LDCS FROM THE SAME GEOGRAPHIC AREA

EnWin Utilities was compared to the following LDCs which are within the same region based on Electricity Distributors Association (EDA) districts: Bluewater Power, E.L.K Energy, Entegrus Powerlines, Erie Thames Powerlines, Essex Powerlines, London Hydro, St. Thomas Energy, and Tillsonburg Hydro.



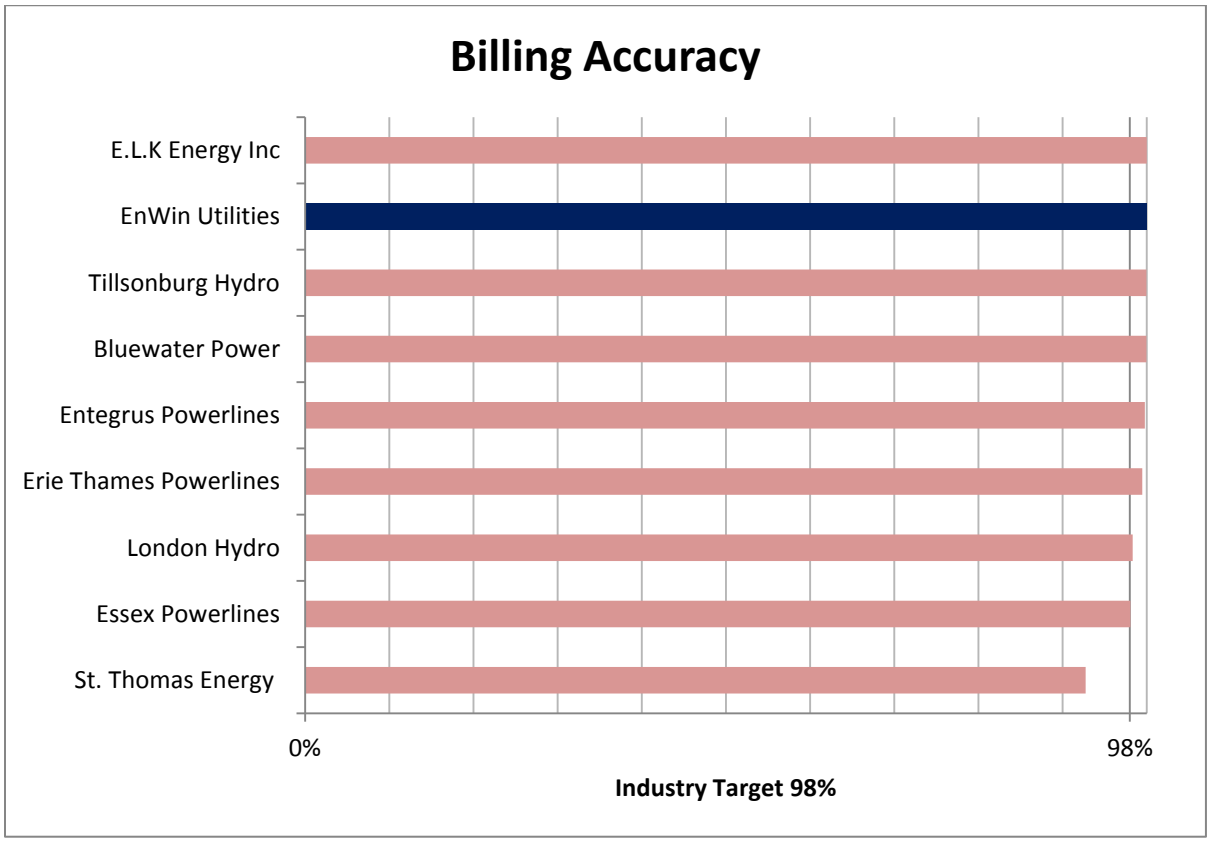

Appointments Met On Time
Tillsonburg Hydro
St. Thomas Energy
London Hydro
Erie Thames Powerlines
EnWin Utilities
E.L.K Energy Inc
Bluewater Power
Essex Powerlines
Entegrus Powerlines
0%
90%
Industry Target: 90%

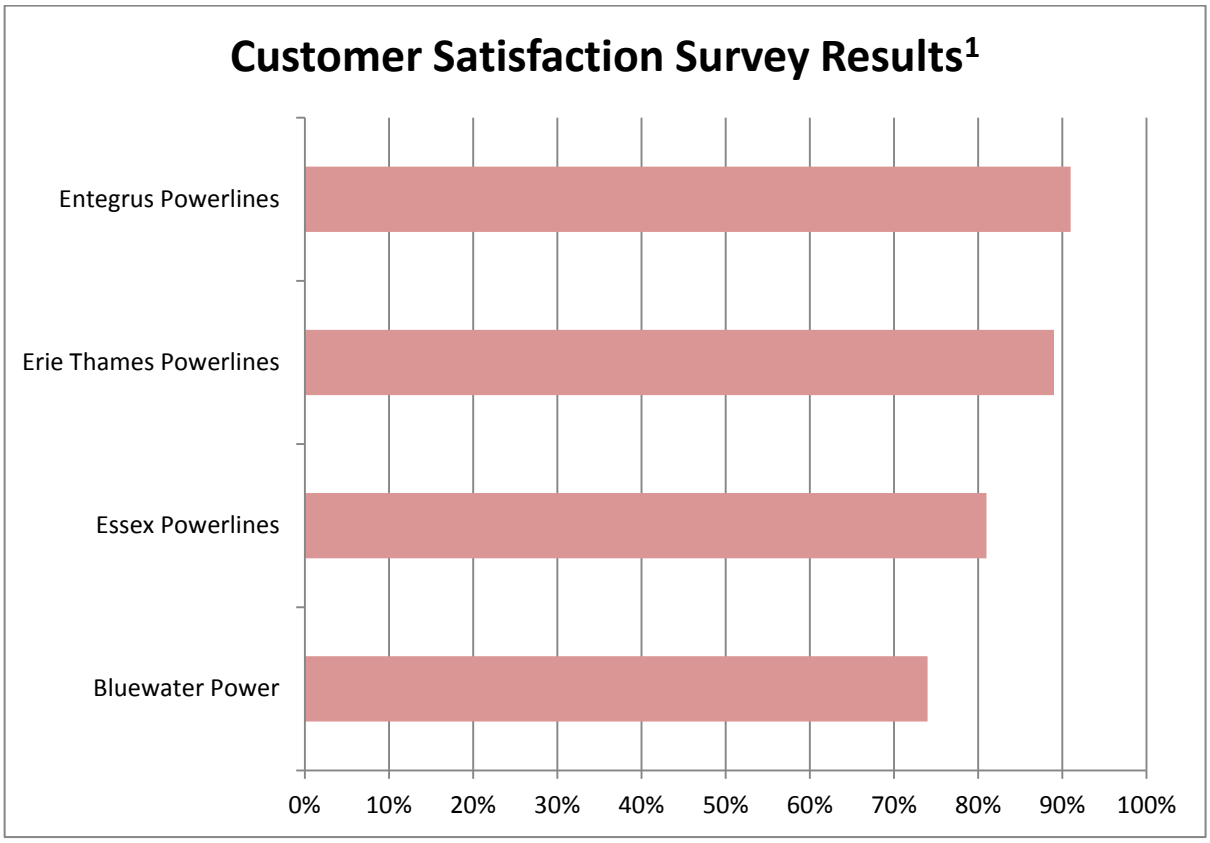

Telephone Calls Answered On Time
Erie Thames Powerlines
E.L.K Energy Inc
Entegrus Powerlines
Essex Powerlines
Bluewater Power
EnWin Utilities
St. Thomas Energy
Tillsonburg Hydro
London Hydro
0%
65%
Industry Target: 65%



Note:

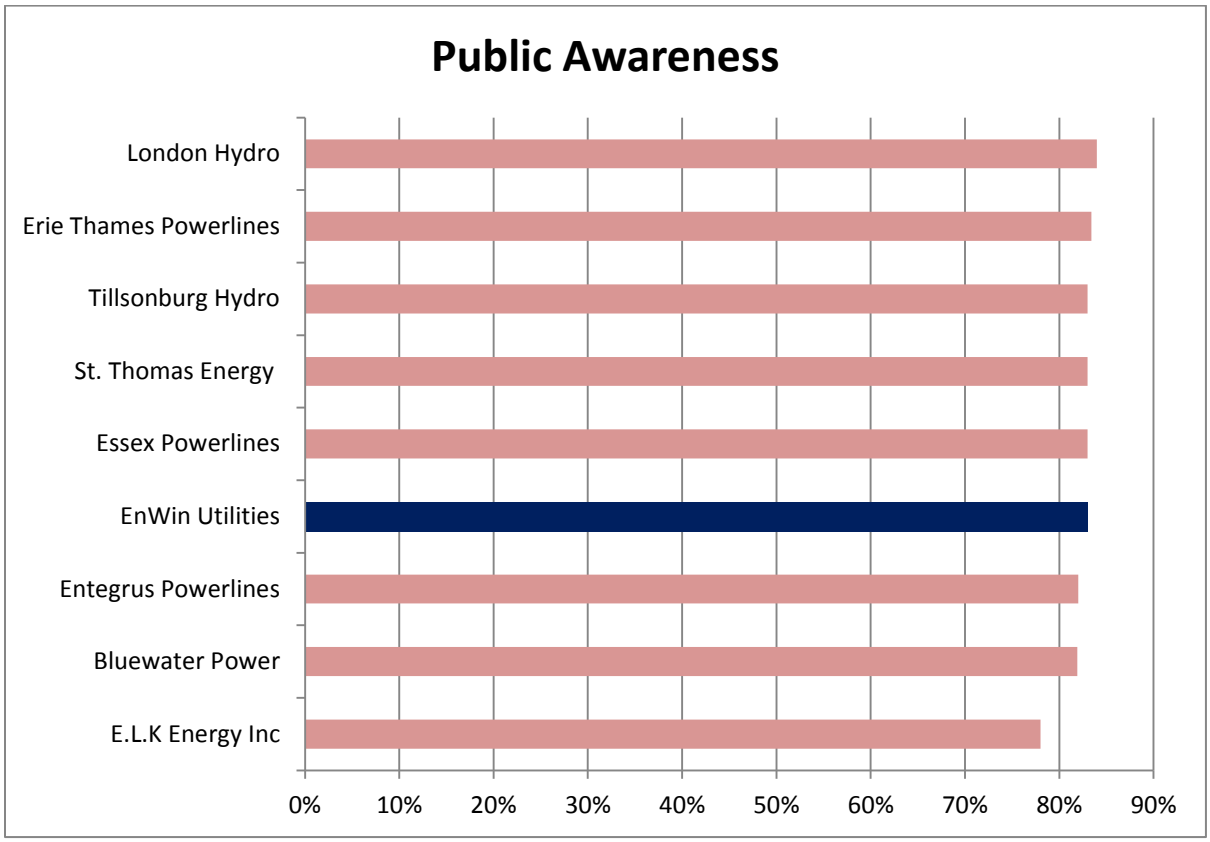
1. First Contact Resolution for E.L.K Energy is “Excellent”.

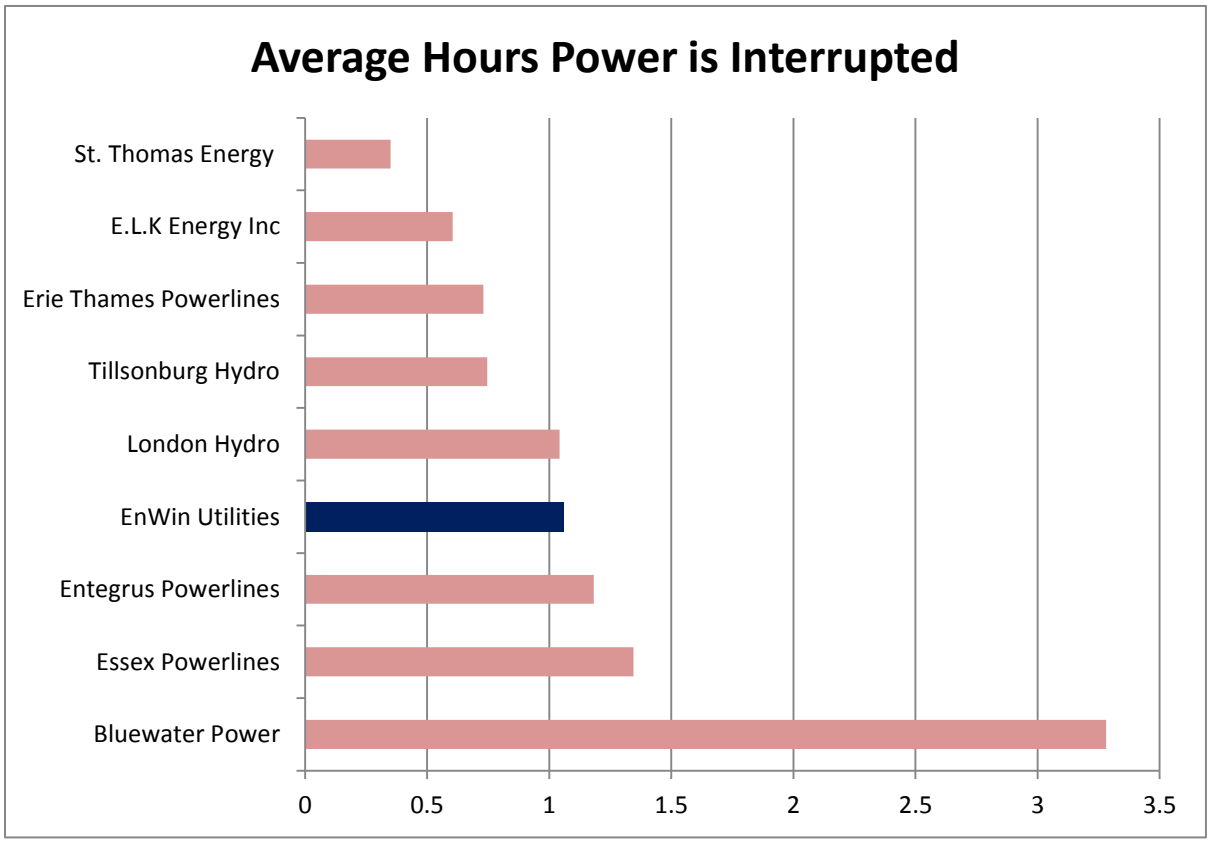


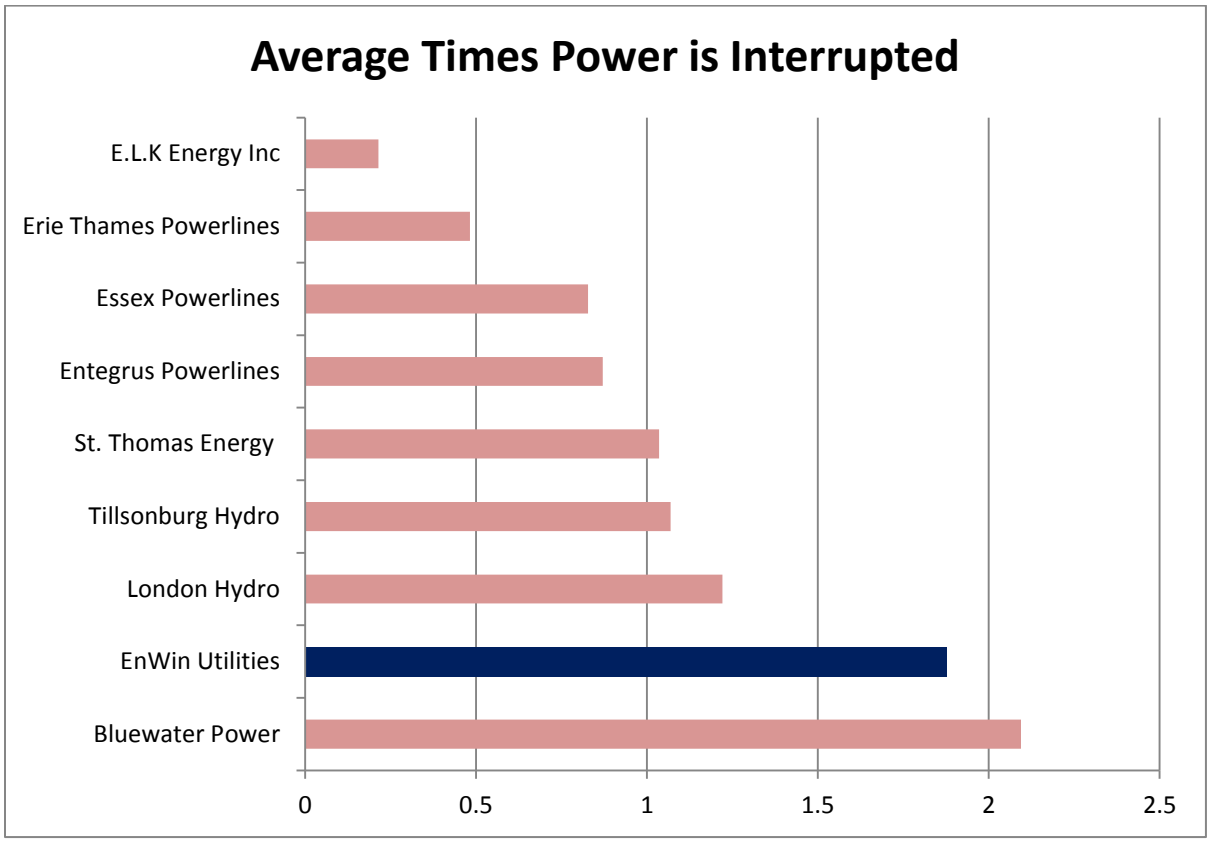


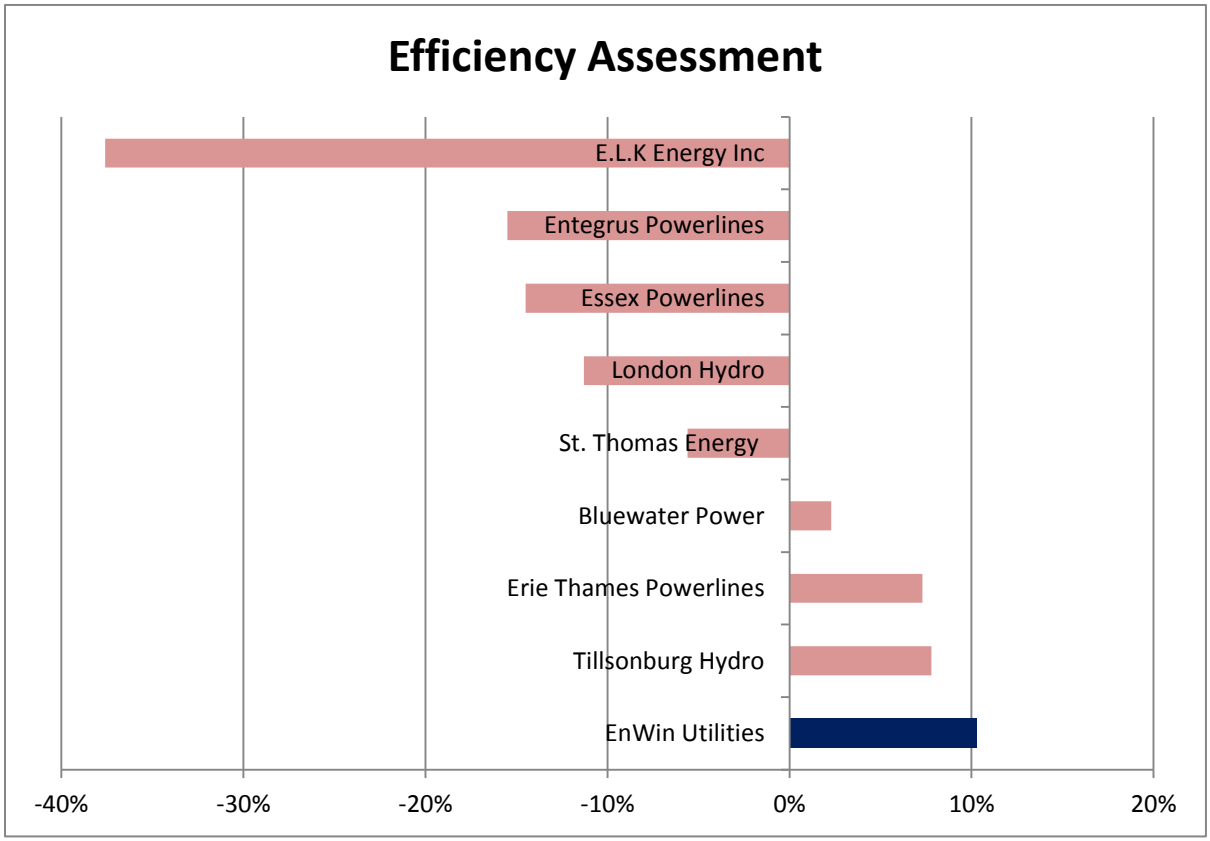
Note:

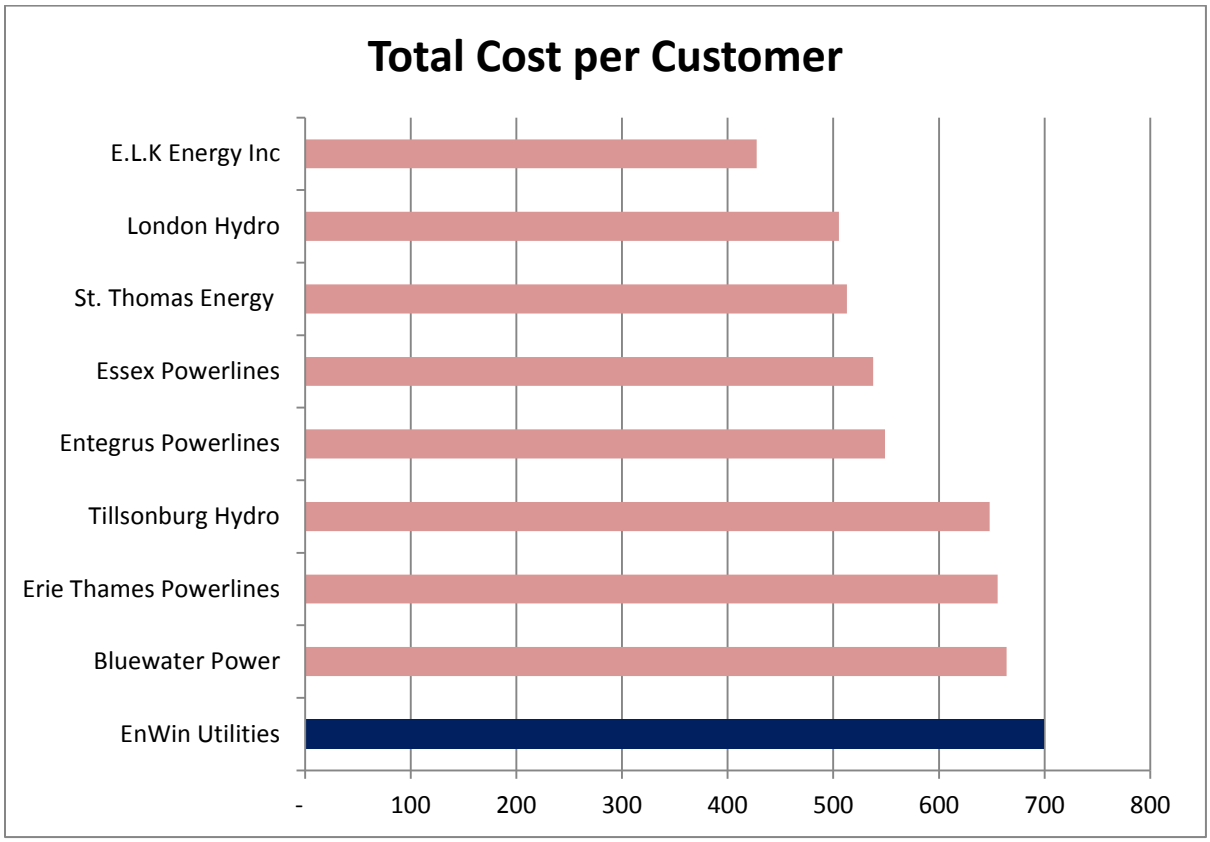
1. Customer Satisfaction Survey Results for E.L.K Energy is “Excellent”, EnWin Utilities is “Good”, London Hydro is “A”, St.Thomas Energy is “B+AA”, Tillsonburg Hydro is “Satisfied”.

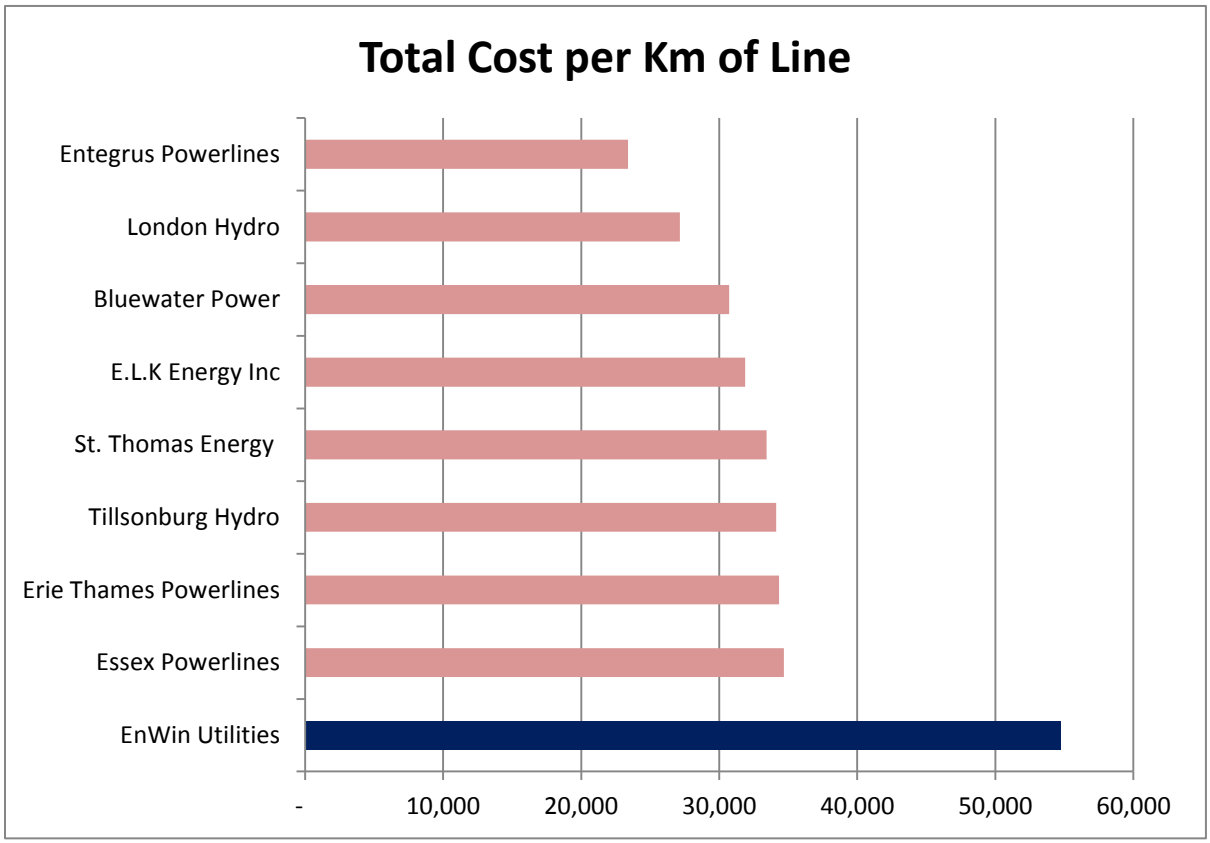

Public Awareness
London Hydro
Erie Thames Powerlines
Tillsonburg Hydro
St. Thomas Energy
Essex Powerlines
EnWin Utilities
Entegrus Powerlines
Bluewater Power
E.L.K Energy Inc
0%
10%
20%
30%
40%
50%
60%
70%
80%
90%

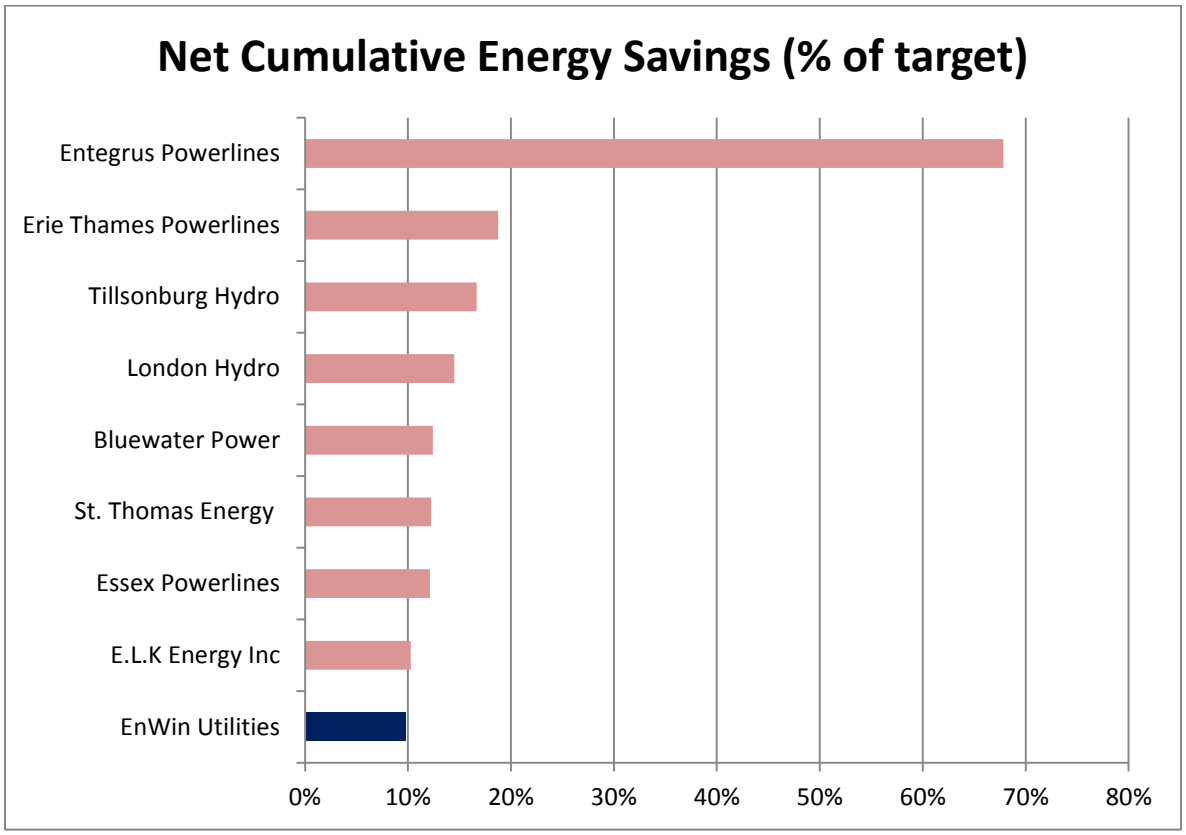

Average Hours Power is Interrupted
St. Thomas Energy
E.L.K Energy Inc
Erie Thames Powerlines
Tillsonburg Hydro
London Hydro
EnWin Utilities
Entegrus Powerlines
Essex Powerlines
Bluewater Power
0
0.5
1
1.5
2
2.5
3
3.5

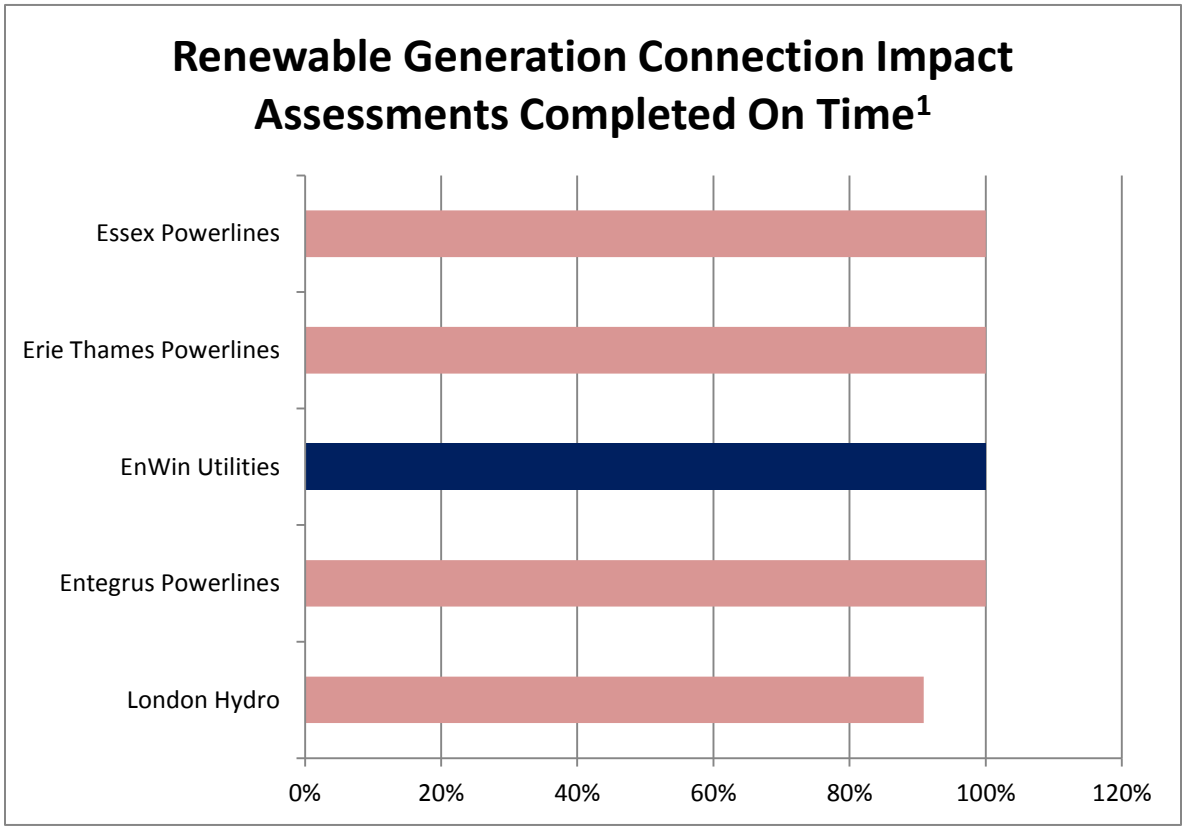

Average Times Power is Interrupted
E.L.K Energy Inc
Erie Thames Powerlines
Essex Powerlines
Entegrus Powerlines
St. Thomas Energy
Tillsonburg Hydro
London Hydro
EnWin Utilities
Bluewater Power
0
0.5
1
1.5
2
2.5


Efficiency Assessment
E.L.K Energy Inc
Entegrus Powerlines
Essex Powerlines
London Hydro
St. Thomas Energy
Bluewater Power
Erie Thames Powerlines
Tillsonburg Hydro
EnWin Utilities
-40%
-30%
-20%
-10%
0%
10%
20%


Total Cost per Customer
E.L.K Energy Inc
London Hydro
St. Thomas Energy
Essex Powerlines
Entegrus Powerlines
Tillsonburg Hydro
Erie Thames Powerlines
Bluewater Power
EnWin Utilities
-
100
200
300
400
500
600
700
800

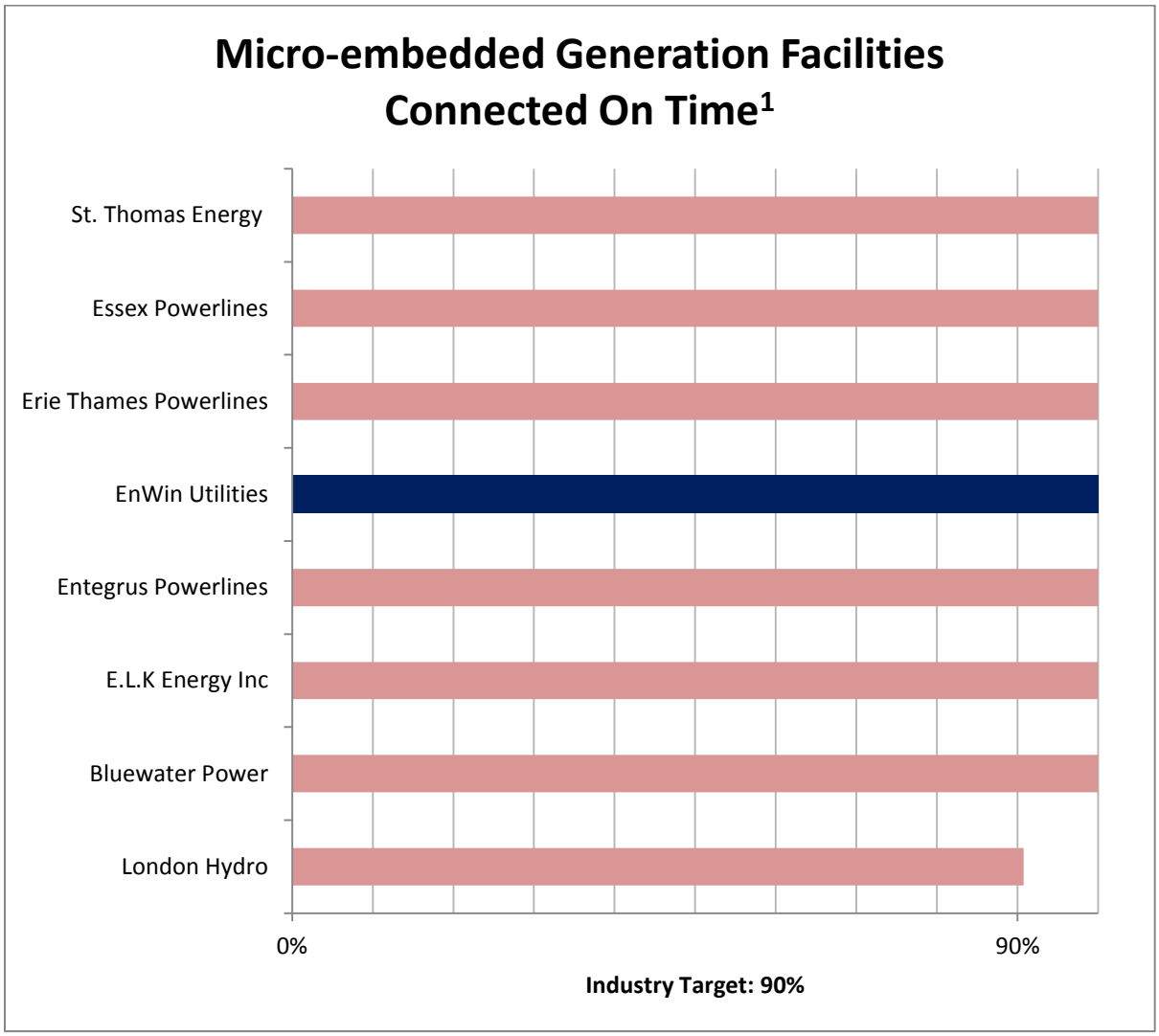

Total Cost per Km of Line
Entegrus Powerlines
London Hydro
Bluewater Power
E.L.K Energy Inc
St. Thomas Energy
Tillsonburg Hydro
Erie Thames Powerlines
Essex Powerlines
EnWin Utilities
-
10,000
20,000
30,000
40,000
50,000
60,000





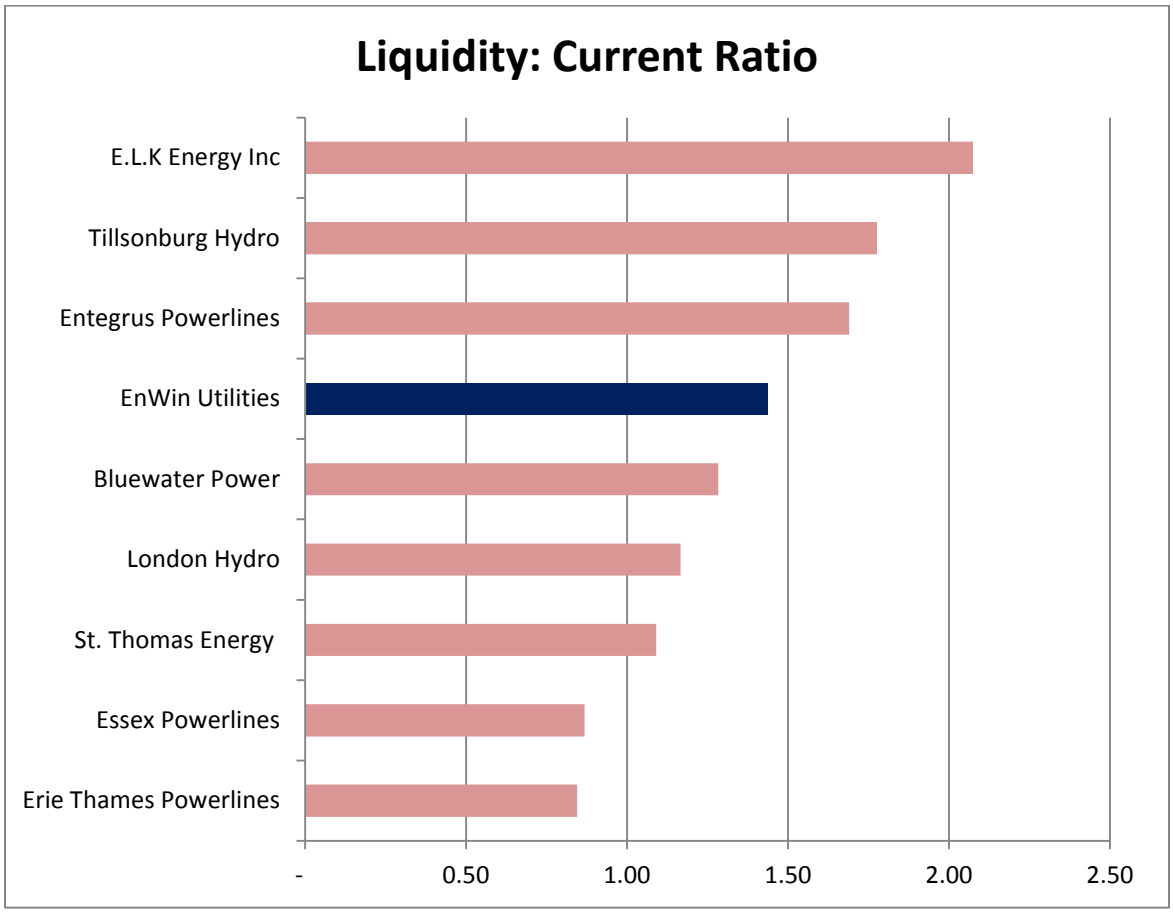
Note:

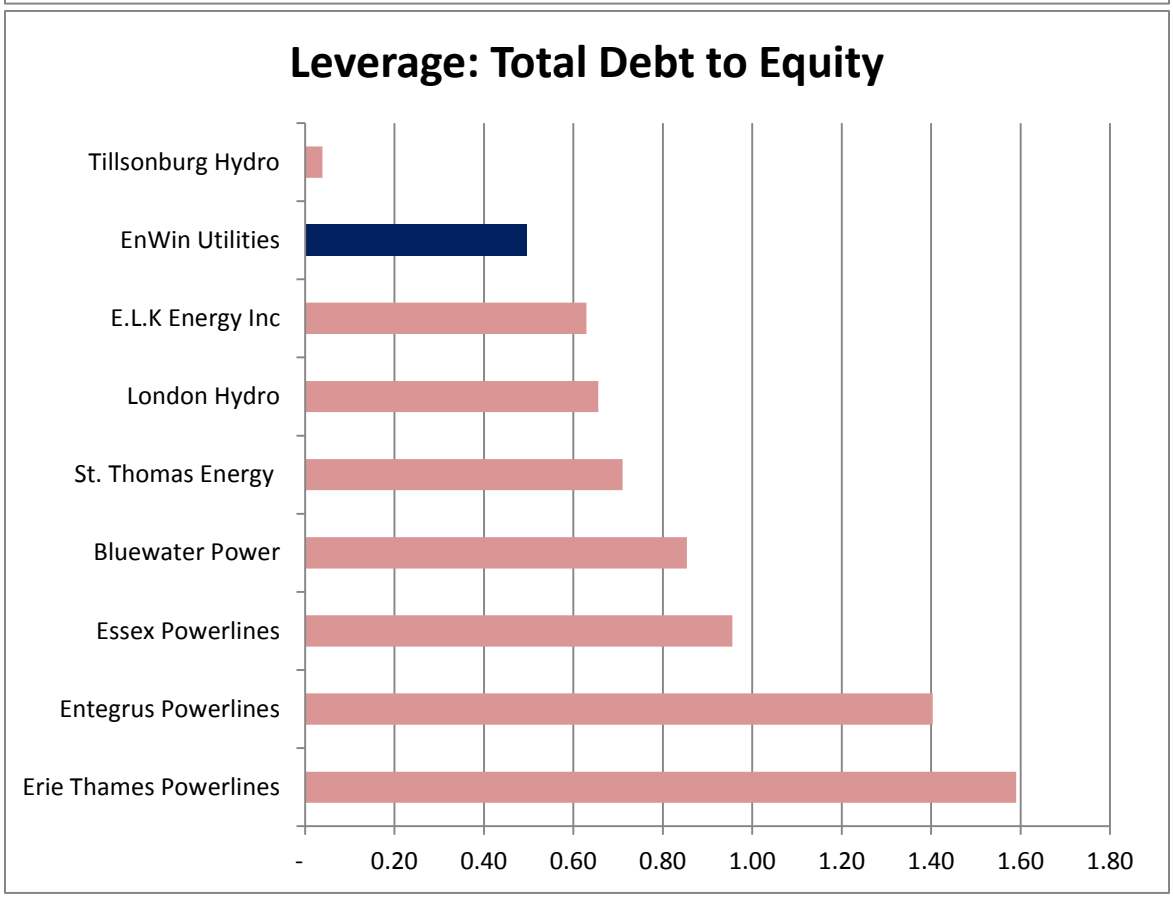
1. Information for Bluewater Power, E.L.K Energy, St.Thomas Energy and Tillsonburg Hydro is not available.

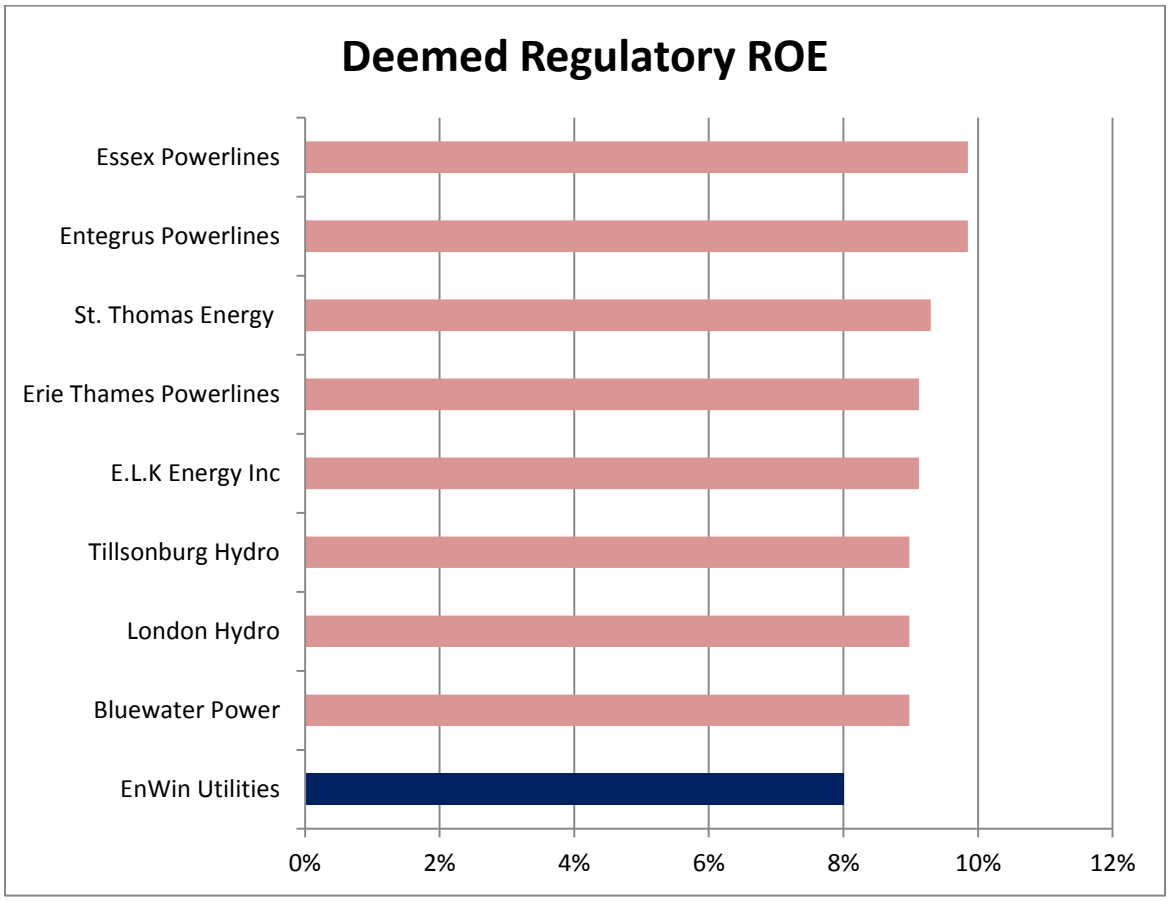


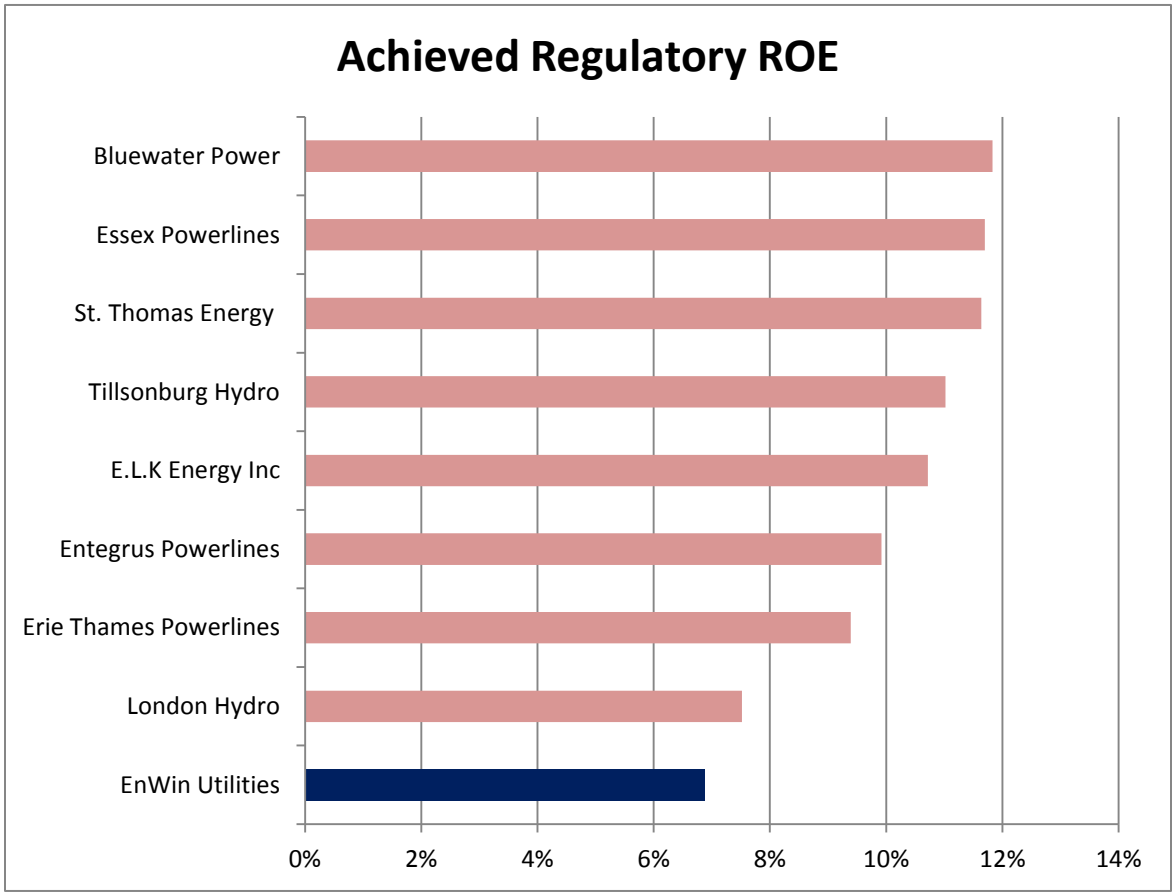
Note:

1. Information for Tillsonburg Hydro was not available.


Liquidity: Current Ratio
E.L.K Energy Inc
Tillsonburg Hydro
Entegrus Powerlines
EnWin Utilities
Bluewater Power
London Hydro
St. Thomas Energy
Essex Powerlines
Erie Thames Powerlines
-
0.50
1.00
1.50
2.00
2.50


Leverage: Total Debt to Equity
Tillsonburg Hydro
EnWin Utilities
E.L.K Energy Inc
London Hydro
St. Thomas Energy
Bluewater Power
Essex Powerlines
Entegrus Powerlines
Erie Thames Powerlines
-
0.20
0.40
0.60
0.80
1.00
1.20
1.40
1.60
1.80


Deemed Regulatory ROE
Essex Powerlines
Entegrus Powerlines
St. Thomas Energy
Erie Thames Powerlines
E.L.K Energy Inc
Tillsonburg Hydro
London Hydro
Bluewater Power
EnWin Utilities
0%
2%
4%
6%
8%
10%
12%


Achieved Regulatory ROE
Bluewater Power
Essex Powerlines
St. Thomas Energy
Tillsonburg Hydro
E.L.K Energy Inc
Entegrus Powerlines
Erie Thames Powerlines
London Hydro
EnWin Utilities
0%
2%
4%
6%
8%
10%
12%
14%

The MEARIE Group - 3700 Steeles Ave West, Suite 1100, Vaughan, Ontario, L4L 8K8

2011/2012 Management Salary Survey

Survey of Ontario's Local Distribution Companies

Survey Overview

We are pleased to provide you with a copy of The MEARIE Group's 2011/2012 ***Management Salary Survey of Ontario's Local Distribution Companies***. We had the best participation in the last decade this year, with a total of 47 utilities participating in the survey. This helps to make the data more robust for all users.

We provided the survey in a web-based format which was available to all LDCs. This is also the second time we have offered the Board of Directors Compensation Survey as an adjunct to the main survey. The surveys are compiled by a third party provider, Cyr & Associates Inc., to ensure confidentiality and consistency of the information. The consolidated results are compiled and provided to The MEARIE Group for distribution and printing.

We added two new positions this year, based on feedback from participants. The new positions are: Billing Supervisor and Conservation and Demand Management Officer. We have also made some minor changes to the groupings of utilities in sections of Employee Size and Customer Size, to better reflect changes and growth within some of the utitlities.

Portions of the data have been marked with an asterisk* where responses were insufficient to report. Not every utility provides complete data for all positions. In some cases, the data isn't available or it is not applicable at that utility. In these cases, the data is marked with an asterisk.

The report has been divided into the following sections:

- All LDCs consolidated
- By Customer Size (electrical metered customers only)
- Revenue Grouping – all gross revenues including the cost of power
- By District
- By Employee Size

Reporting in this manner allows a complete representation of data to better assist you with your compensation and organisational planning. In the interests of continually striving to serve you better, please forward any suggestions or comments on this survey to - Connie McLaren, Sales and Marketing Manager, H.R. and Business Services at cmclaren@mearie.ca or by contacting her directly at The MEARIE Group's offices (905) 265-5327.

We are always looking for your suggestions on any positions or changes that you feel should be included in the survey to better serve you. Remember, positions have to be commonly represented across the utilities to be included in the survey.

Table of Contents:

Participant List (Alphabetical Order)

Local Distribution Company	District	Customer Size	Employee Base
Bluewater Power Distribution	WE - Western	35,704	118
Brant County Power Inc.	NG - Niagara Grand	9,645	29
Burlington Hydro Inc.	UC - Upper Canada	65,000	94
Chatham-Kent Energy	WE - Western	32,645	81
City of Brantford (Brantford Power)	NG - Niagara Grand	38,159	84
Collingwood Utility Services	GB - Georgian Bay	15,430	46
Enwin Utilities Ltd.	WE - Western	86,428	192
Erie Thames Powerlines	NE - Northeastern	14,376	37
Essex Power Corporation	WE - Western	28,270	57
Festival Hydro Inc	NG - Niagara Grand	19,750	45
Fort Frances Power Corporation	NW - Northwestern	3,770	9
Greater Sudbury Utilities	NE - Northeastern	47,500	112
Grimsby Power Incorporated	NG - Niagara Grand	10,231	17
Guelph Hydro Electric Systems Inc.	NG - Niagara Grand	50,250	99
Haldimand County Hydro Inc.	NG - Niagara Grand	20,972	48
Hydro Ottawa Group of Companies	NE - Northeastern	302,306	550
Innisfil Hydro Distribution Systems Ltd	GB - Georgian Bay	14,797	32
Kenora Hydro Electric Corporation Ltd	NW - Northwestern	5,600	16
Kitchener-Wilmot Hydro Inc.	NG - Niagara Grand	86,939	172
Lakeland Holding Ltd	GB - Georgian Bay	9,532	35
London Hydro Inc.	WE - Western	149,200	307
Midland Power Utility Corporation	GB - Georgian Bay	6,900	15
Milton Hydro Distribution Inc	UC - Upper Canada	29,789	45
Newmarket-Tay Power Distribution Ltd.	NE - Northeastern	31,000	52
Niagara Peninsula Energy	NG - Niagara Grand	51,048	113
Niagara-on-the-Lake Hydro Inc.	NG - Niagara Grand	7,882	18
Norfolk Power Distribution Inc.	NG - Niagara Grand	19,058	47
North Bay Hydro	NE - Northeastern	23,000	46
Northern Ontario Wires Inc.	NE - Northeastern	6,100	14
Orangeville Hydro	GB - Georgian Bay	11,347	20
Orillia Power Corporation	GB - Georgian Bay	12,900	46
Oshawa PUC Networks, Inc.	UC - Upper Canada	55,000	64
Ottawa River Power Corporation	UC - Upper Canada	10,518	28
Peterborough Utilities	NE - Northeastern	35,000	158
PowerStream	UC - Upper Canada	330,000	450
PUC Services Inc.	NE - Northeastern	33,000	180
Sioux Lookout Hydro Inc.	NW - Northwestern	2,750	8
St. Thomas Energy Services Inc.	WE - Western	16,420	35
Thunder Bay Hydro	NW - Northwestern	49,587	123
Utilities Kingston	UC - Upper Canada	26,940	378

Participant List (Alphabetical Order)

Local Distribution Company	District	Customer Size	Employee Base
Veridian	NE - Northeastern	112,915	217
Wasaga Distribution Inc.	GB - Georgian Bay	12,095	19
Waterloo North Hydro Inc.	NG - Niagara Grand	51,934	116
Welland Hydro-Electric System Corp.	NG - Niagara Grand	22,000	39
Westario Power Inc.	GB - Georgian Bay	22,007	35
Whitby Hydro	UC - Upper Canada	40,000	66
Woodstock Hydro Services Inc.	WE - Western	15,000	37

Using the Survey Results

The 2011/2012 Management Salary Survey for Ontario LDCs represents data submitted by 47 organizations covering approximately 4549 incumbents in 37 different executive, managerial, professional and administrative positions. All salary data is based on rates effective June 1st, 2011. We reserve the right to exclude data which is considered statistically invalid or incorrect and have contacted individual participants for clarification in some instances. Where job matches were clearly incorrect or single incumbent jobs were reported in several positions, data may have been modified to correct the entry.

Salary surveys can be a tremendously valuable tool to assist you in your workforce planning, salary administration and budgeting. However, results can vary from year to year depending upon the number of participants in the survey and the data provided.

Keep in mind that compensation surveys can only reflect 'benchmark' positions. **Benchmark** positions are those jobs that are commonly found across the industry, where primary responsibilities and incumbent requirements are consistent for approximately 80% of the primary responsibilities. You should also be sensitive to variables in jobs that are affected by the scope of the role, location or size of organization.

Generally, if you can match 40% to 50% of your key jobs to external data – such as this report, you will have a strong basis on which to plan your compensation program. When using the data, match your jobs to the survey based on job content and not the job title. Other unique positions do not have significant enough representation to provide accurate compensation data. Please note the following:

To preserve the confidentiality of data supplied by participating organizations, compensation data is reported only where a minimum of three organizations and three incumbents are included in the sample. Compensation medians, P25 and P75 for actual salaries are reported only where there is a minimum of four organizations and four incumbents included in the data. Where there was insufficient data, information was not reported.

Survey Definitions

# of Companies	The actual number of companies reporting information for the position.
# of Incumbents	The actual number of **incumbents in the role.**
Average Range Maximum	The average maximum rate of the salary ranges for all respondents.
Average Range Minimum	The average minimum rate of the salary ranges for all respondents.
Bonus	An after-the-fact reward or payment based on the performance of an individual, a group of workers operating as a unit, a division or an entire work force.
Executive	The group of individuals who head major operating functions of the organization and typically report to the President/CEO.
Gainsharing	A bonus plan aimed at improving productivity or costs through improved work methods.
Gross Revenues	Total revenues from inflow of assets, including revenues from sales of products or services.
Average Incentive Maximum%	The maximum annual cash incentive for the job as a percentage of base salary.
Average Incentive Target %	The target annual cash incentive for the job as a percentage of base salary.
Individual Incentive	Any form of variable payment tied to performance. The payment is a monetary award. Incentives are contrasted with bonuses in that performance goals for incentives are predetermined.
Mean (Average Actual)	The sum of the actual average salary reported divided by the number of respondents.
Median (Median of the actual salaries reported).	Median is the middle rate when data are arranged in order and there is an odd number of observations (i.e. 3, 5, 7 etc.). It is the mean of the two middle observations when the data is arranged in order for even number observations (2, 10 etc.); most compensation professionals prefer to make comparisons on this basis since it is less easily influenced by extreme values.
Middle Management	The group of managers and/or professionals directly reporting to the Executive.
P25 (25th percentile of actual salaries reported)	25th Percentile (1st Quartile) – The rate within the sample of actual reported base salaries which is higher than 25% of all rates reported.
P75 (75th percentile of actual salaries reported)	75th Percentile (3rd Quartile) – The rate within the sample of actual reported base salaries which is higher than 75% of all rates reported.
Profit Sharing	An automatic fixed percentage of total profits or of profits above a certain threshold awarded to employees strictly on the performance of the entire organization.
Team Based Incentive	A specified project or operational team may receive an incentive based upon results, deliverables or an increase in productivity.
Variable Pay	Compensation that is contingent on discretion, performance or results achieved. It may be referred to as pay at risk.

Compensation Analysis: All Local Distribution Companies

Table 1: Annual Salaries – All LDCs

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
President/CEO/GM	47	40	$130,701	$171,856	$160,573	$138,000	$181,200	$155,197	19	25
V.P. Operations & Engineering/COO	47	23	$115,365	$148,286	$140,616	$121,161	$149,959	$135,000	16	21
Director/V.P. Operations	47	16	$108,531	$134,429	$127,074	$112,770	$134,213	$128,454	12	15
Director/V.P. Engineering	47	13	$110,286	$134,240	$124,370	$113,547	$132,120	$124,110	12	18
Engineering Manager	47	26	$86,496	$109,348	$102,631	$95,431	$109,361	$104,428	7	10
Distribution Engineer	47	19	$77,265	$103,602	$92,923	$86,896	$100,271	$91,305	5	8
Engineering Supervisor	47	25	$72,961	$95,523	$88,870	$83,371	$93,832	$87,568	5	9
Operations Manager or Superintendent	47	43	$83,198	$105,865	$98,123	$92,739	$101,299	$97,900	5	10
Control Centre Supervisor	47	17	$79,603	$99,408	$94,580	$89,777	$100,555	$92,438	6	10
Meter Shop Supervisor	47	23	$76,032	$94,715	$90,252	$85,425	$95,878	$90,230	6	8
Line Supervisor	47	91	$74,896	$94,642	$88,657	$84,838	$90,721	$88,169	6	10
Purchasing/Procurement Manager	47	19	$74,468	$95,035	$87,182	$78,649	$96,423	$85,051	7	11
Stores/Inventory Control Supervisor	47	10	$65,482	$82,358	$81,849	$78,998	$91,021	$79,552	8	8
Executive Assistant (to President)	47	33	$56,830	$71,145	$67,550	$63,168	$72,629	$66,631	5	8
Administrative Assistant	47	40	$49,603	$61,385	$58,353	$54,166	$63,150	$59,535	6	7
Director/VP Finance/CFO	47	37	$109,196	$141,457	$131,626	$109,273	$141,370	$130,816	14	22
Controller/Manager Finance	47	25	$86,535	$110,417	$100,353	$91,519	$106,161	$97,448	8	12
General Accounting Manager	47	14	$78,565	$100,891	$92,399	$83,563	$97,516	$91,783	7	12
Accounting Supervisor	47	21	$66,912	$85,518	$79,820	$72,990	$84,686	$80,470	8	9
Billing Supervisor	47	18	$67,697	$85,036	$79,553	$75,168	$82,937	$79,552	7	10
Director or VP, Customer Service	47	16	$96,884	$126,227	$119,488	$106,534	$128,091	$113,050	11	15
Manager, Customer Service	47	20	$78,924	$103,224	$93,455	$87,467	$102,964	$91,416	7	11
Customer Service Supervisor	47	30	$63,778	$81,661	$74,532	$69,137	$81,454	$75,611	6	8
Financial/Business Analyst	47	35	$63,778	$81,661	$75,777	$70,703	$82,090	$76,491	6	9
Director or VP, Regulatory Affairs	47	10	$107,397	$143,828	$131,861	$122,981	$135,325	$129,246	14	20
Manager, Regulatory Affairs	47	19	$71,257	$94,672	$86,207	$76,608	$91,748	$82,775	5	9

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
Settlement/Rate Analyst	47	18	$66,859	$81,102	$77,269	$69,617	$82,371	$72,916	6	7
Conservation & DM Officer	47	21	$69,106	$85,437	$77,501	$68,959	$86,236	$79,854	7	9
I.S. Director/VP	47	11	$105,297	$135,502	$129,327	$118,512	$133,258	$121,055	13	19
I.S. Manager	47	18	$76,923	$100,343	$92,605	$83,165	$102,402	$89,150	9	13
I.S. Supervisor/Computer Operations	47	9	$74,688	$98,776	$87,926	$81,167	$95,159	$89,337	5	8
Systems Administrator/Apps Support	47	33	$62,730	$80,590	$76,554	$70,562	$82,306	$79,166	5	8
Human Resources Director/VP	47	11	$106,192	$125,031	$126,208	$107,487	$136,732	$127,182	15	19
Human Resources Manager	47	14	$80,533	$105,896	$94,879	$84,348	$103,509	$91,332	8	14
Human Resources Generalist/Officer	47	18	$62,052	$81,596	$74,453	$66,731	$78,442	$73,930	8	8
Human Resources Assistant/Coord.	47	16	$51,512	$65,185	$59,684	$58,512	$64,168	$61,402	6	7
Manager Health & Safety/Loss Control	47	20	$76,775	$96,828	$91,370	$85,981	$97,041	$90,667	8	12

Compensation Analysis: By Customer Size

Table 2: Customer Size – LDCs (1 to 10,000 Customers)

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
President/CEO/GM	8	8	98,496	122,100	115,292	106,540	118,436	114,202	*	*
V.P. Operations & Engineering/COO	*	*	*	*	*	*	*	*	*	*
Director/V.P. Operations	*	*	*	*	*	*	*	*	*	*
Director/V.P. Engineering	*	*	*	*	*	*	*	*	*	*
Engineering Manager	*	*	*	*	*	*	*	*	*	*
Distribution Engineer	*	*	*	*	*	*	*	*	*	*
Engineering Supervisor	*	*	*	*	*	*	*	*	*	*
Operations Manager or Superintendent	8	6	*	*	90,948	88,523	96,574	91,273	*	*
Control Centre Supervisor	*	*	*	*	*	*	*	*	*	*
Meter Shop Supervisor	*	*	*	*	*	*	*	*	*	*
Line Supervisor	8	3	*	*	84,677	*	*	*	*	*
Purchasing/Procurement Manager	*	*	*	*	*	*	*	*	*	*
Stores/Inventory Control Supervisor	*	*	*	*	*	*	*	*	*	*
Executive Assistant (to President)	*	*	*	*	*	*	*	*	*	*
Administrative Assistant	*	*	*	*	*	*	*	*	*	*
Director/VP Finance/CFO	8	5	*	*	95,653	86,990	98,318	89,105	*	*
Controller/Manager Finance	8	3	*	*	78,608	*	*	*	*	*
General Accounting Manager	*	*	*	*	*	*	*	*	*	*
Accounting Supervisor	*	*	*	*	*	*	*	*	*	*
Billing Supervisor	*	*	*	*	*	*	*	*	*	*
Director or VP, Customer Service	*	*	*	*	*	*	*	*	*	*
Manager, Customer Service	*	*	*	*	*	*	*	*	*	*
Customer Service Supervisor	*	*	*	*	*	*	*	*	*	*
Financial/Business Analyst	*	*	*	*	*	*	*	*	*	*
Director or VP, Regulatory Affairs	*	*	*	*	*	*	*	*	*	*
Manager, Regulatory Affairs	*	*	*	*	*	*	*	*	*	*

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
Settlement/Rate Analyst	*	*	*	*	*	*	*	*	*	*
Conservation & DM Officer	*	*	*	*	*	*	*	*	*	*
I.S. Director/VP	*	*	*	*	*	*	*	*	*	*
I.S. Manager	*	*	*	*	*	*	*	*	*	*
I.S. Supervisor/Computer Operations	*	*	*	*	*	*	*	*	*	*
Systems Administrator/Apps Support	*	*	*	*	*	*	*	*	*	*
Human Resources Director/VP	*	*	*	*	*	*	*	*	*	*
Human Resources Manager	*	*	*	*	*	*	*	*	*	*
Human Resources Generalist/Officer	*	*	*	*	*	*	*	*	*	*
Human Resources Assistant/Coord.	*	*	*	*	*	*	*	*	*	*
Manager Health & Safety/Loss Control	*	*	*	*	*	*	*	*	*	*

Compensation Analysis: By Customer Size
Table 3: Customer Size – LDCs (10,001 to 20,000 Customers)

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
President/CEO/GM	12	11	126,557	160,653	147,731	134,664	151,450	139,435	*	*
V.P. Operations & Engineering/COO	12	4	106,303	128,161	120,620	110,012	128,573	117,965	*	*
Director/V.P. Operations	*	*	*	*	*	*	*	*	*	*
Director/V.P. Engineering	*	*	*	*	*	*	*	*	*	*
Engineering Manager	12	6	79,904	99,977	92,792	89,146	99,152	90,500	*	*
Distribution Engineer	*	*	*	*	*	*	*	*	*	*
Engineering Supervisor	*	*	*	*	*	*	*	*	*	*
Operations Manager or Superintendent	12	7	81,606	105,111	97,664	96,036	99,878	98,340	*	*
Control Centre Supervisor	*	*	*	*	*	*	*	*	*	*
Meter Shop Supervisor	12	3	74,929	92,476	89,007	*	*	*	*	*
Line Supervisor	12	8	74,301	95,186	86,178	84,524	87,720	86,623	*	*
Purchasing/Procurement Manager	12	3	63,020	83,399	76,676	*	*	*	*	*
Stores/Inventory Control Supervisor	*	*	*	*	*	*	*	*	*	*
Executive Assistant (to President)	12	5	*	*	61,362	57,350	64,900	63,220	*	*
Administrative Assistant	12	3	47,339	56,755	54,040	*	*	*	*	*
Director/VP Finance/CFO	12	8	98,197	126,169	114,797	105,137	130,740	109,697	*	*
Controller/Manager Finance	12	5	85,896	102,358	95,317	94,370	99,152	98,492	*	*
General Accounting Manager	*	*	*	*	*	*	*	*	*	*
Accounting Supervisor	12	3	62,162	87,952	76,309	*	*	*	*	*
Billing Supervisor	*	*	*	*	*	*	*	*	*	*
Director or VP, Customer Service	*	*	*	*	*	*	*	*	*	*
Manager, Customer Service	12	3	*	*	91,322	*	*	*	*	*
Customer Service Supervisor	12	3	*	*	67,841	*	*	*	*	*
Financial/Business Analyst	12	5	61,419	80,938	75,020	68,581	79,310	72,870	*	*
Director or VP, Regulatory Affairs	*	*	*	*	*	*	*	*	*	*
Manager, Regulatory Affairs	*	*	*	*	*	*	*	*	*	*

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
Settlement/Rate Analyst	*	*	*	*	*	*	*	*	*	*
Conservation & DM Officer	*	*	*	*	*	*	*	*	*	*
I.S. Director/VP	*	*	*	*	*	*	*	*	*	*
I.S. Manager	12	3	69,224	91,274	82,484	*	*	*	*	*
I.S. Supervisor/Computer Operations	*	*	*	*	*	*	*	*	*	*
Systems Administrator/Apps Support	12	3	52,264	78,325	60,740	*	*	*	*	*
Human Resources Director/VP	*	*	*	*	*	*	*	*	*	*
Human Resources Manager	12	3	*	*	84,360	*	*	*	*	*
Human Resources Generalist/Officer	*	*	*	*	*	*	*	*	*	*
Human Resources Assistant/Coord.	*	*	*	*	*	*	*	*	*	*
Manager Health & Safety/Loss Control	*	*	*	*	*	*	*	*	*	*

Compensation Analysis: By Customer Size
Table 4: Customer Size – LDCs (20,001 to 30,000 Customers)

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
President/CEO/GM	7	6	123,803	158,893	155,345	150,931	156,764	155,598	13	20
V.P. Operations & Engineering/COO	*	*	*	*	*	*	*	*	*	*
Director/V.P. Operations	*	*	*	*	*	*	*	*	*	*
Director/V.P. Engineering	*	*	*	*	*	*	*	*	*	*
Engineering Manager	*	4	87,098	112,665	102,421	95,431	104,140	97,149	*	*
Distribution Engineer	*	*	*	*	*	*	*	*	*	*
Engineering Supervisor	*	3	70,018	88,561	*	*	*	*	*	*
Operations Manager or Superintendent	*	5	81,906	105,682	95,950	87,006	94,870	90,359	6	7
Control Centre Supervisor	*	*	*	*	*	*	*	*	*	*
Meter Shop Supervisor	*	3	75,369	93,664	89,269	*	*	*	*	*
Line Supervisor	*	11	74,630	95,553	89,023	84,517	92,644	84,838	*	*
Purchasing/Procurement Manager	*	*	*	*	*	*	*	*	*	*
Stores/Inventory Control Supervisor	*	*	*	*	*	*	*	*	*	*
Executive Assistant (to President)	*	6	55,908	69,614	69,872	67,906	72,788	71,775	*	*
Administrative Assistant	*	*	*	*	*	*	*	*	*	*
Director/VP Finance/CFO	*	6	100,112	124,715	120,113	108,654	114,777	112,429	7	10
Controller/Manager Finance	*	*	*	*	*	*	*	*	*	*
General Accounting Manager	*	*	*	*	*	*	*	*	*	*
Accounting Supervisor	*	*	*	*	*	*	*	*	*	*
Billing Supervisor	*	3	*	*	76,919	*	*	*	*	*
Director or VP, Customer Service	*	*	*	*	*	*	*	*	*	*
Manager, Customer Service	*	*	*	*	*	*	*	*	*	*
Customer Service Supervisor	*	4	60,673	74,550	69,670	61,577	76,579	68,486	*	*
Financial/Business Analyst	*	8	61,640	78,586	71,148	62,505	78,550	68,297	*	*
Director or VP, Regulatory Affairs	*	*	*	*	*	*	*	*	*	*
Manager, Regulatory Affairs	*	3	64,664	79,833	73,740	*	*	*	*	*

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
Settlement/Rate Analyst	*	3	67,114	84,432	75,831	*	*	*	*	*
Conservation & DM Officer	*	3	*	*	64,565	*	*	*	*	*
I.S. Director/VP	*	*	*	*	*	*	*	*	*	*
I.S. Manager	*	3	67,482	88,958	74,831	*	*	*	*	*
I.S. Supervisor/Computer Operations	*	*	*	*	*	*	*	*	*	*
Systems Administrator/Apps Support	*	10	60,052	74,943	68,026	62,557	73,093	72,831	*	*
Human Resources Director/VP	*	*	*	*	*	*	*	*	*	*
Human Resources Manager	*	*	*	*	*	*	*	*	*	*
Human Resources Generalist/Officer	*	*	*	*	*	*	*	*	*	*
Human Resources Assistant/Coord.	*	*	*	*	*	*	*	*	*	*
Manager Health & Safety/Loss Control	*	*	*	*	*	*	*	*	*	*

Compensation Analysis: By Customer Size
Table 5: Customer Size – LDCs (30,001 to 40,000 Customers)

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
President/CEO/GM	7	6	144,263	185,639	181,462	163,145	194,206	181,200	19	19
V.P. Operations & Engineering/COO	*	5	109,250	136,875	132,485	128,041	133,397	131,943	*	*
Director/V.P. Operations	*	5	96,276	115,154	113,565	106,200	115,465	107,212	*	*
Director/V.P. Engineering	*	3	*	116,852	116,852	*	*	*	*	*
Engineering Manager	*	3	88,160	111,423	109,329	*	*	*	*	*
Distribution Engineer	*	*	*	*	*	*	*	*	*	*
Engineering Supervisor	*	4	80,099	100,437	95,266	87,629	95,597	87,959	*	*
Operations Manager or Superintendent	*	6	82,025	100,719	99,559	93,433	101,661	96,635	4	4
Control Centre Supervisor	*	3	*	99,932	99,932	*	*	*	*	*
Meter Shop Supervisor	*	4	73,925	93,593	92,535	89,541	95,227	92,232	*	*
Line Supervisor	*	11	71,872	88,703	86,961	84,628	89,683	86,285	4	4
Purchasing/Procurement Manager	*	3	71,525	88,641	86,262	*	*	*	*	*
Stores/Inventory Control Supervisor	*	*	*	*	*	*	*	*	*	*
Executive Assistant (to President)	*	7	54,338	66,699	65,840	63,231	68,173	64,963	4	4
Administrative Assistant	*	7	45,874	54,898	54,403	56,180	59,096	56,303	*	*
Director/VP Finance/CFO	*	7	285,632	136,446	136,669	131,380	141,051	133,397	10	10
Controller/Manager Finance	*	5	70,705	95,295	93,060	89,747	98,687	95,374	4	4
General Accounting Manager	*	*	*	*	*	*	*	*	*	*
Accounting Supervisor	*	*	*	*	*	*	*	*	*	*
Billing Supervisor	*	*	*	*	*	*	*	*	*	*
Director or VP, Customer Service	*	4	92,278	117,416	113,096	105,673	117,679	110,256	*	*
Manager, Customer Service	*	5	75,040	98,245	97,186	89,150	102,402	99,346	4	4
Customer Service Supervisor	*	5	58,420	79,555	80,147	78,300	82,078	80,231	4	4
Financial/Business Analyst	*	6	61,837	77,144	74,807	72,467	81,772	76,491	*	*
Director or VP, Regulatory Affairs	*	*	*	*	*	*	*	*	*	*
Manager, Regulatory Affairs	*	6	68,779	90,390	87,099	81,053	90,854	88,530	4	4

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
Settlement/Rate Analyst	*	5	70,298	88,433	86,362	*	*	*	*	*
Conservation & DM Officer	*	5	58,206	64,669	67,706	60,000	79,854	68,959	*	*
I.S. Director/VP	*	*	*	*	*	*	*	*	*	*
I.S. Manager	*	5	71,225	94,865	91,466	83,165	102,402	89,150	*	*
I.S. Supervisor/Computer Operations	*	*	*	*	*	*	*	*	*	*
Systems Administrator/Apps Support	*	7	58,360	75,655	80,673	76,983	83,508	79,818	*	*
Human Resources Director/VP	*	*	*	*	*	*	*	*	*	*
Human Resources Manager	*	*	*	*	*	*	*	*	*	*
Human Resources Generalist/Officer	*	4	59,869	74,754	73,063	*	*	*	*	*
Human Resources Assistant/Coord.	*	*	*	*	*	*	*	*	*	*
Manager Health & Safety/Loss Control	*	4	71,753	88,257	85,555	80,084	88,811	83,340	*	*

Compensation Analysis: By Customer Size
Table 6: Customer Size – LDCs (40,001-80,000 Customers)

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
President/CEO/GM	7	5	144,579	186,186	175,539	161,790	179,495	174,900	*	*
V.P. Operations & Engineering/COO	*	5	128,949	158,910	143,035	139,564	146,914	140,692	12	16
Director/V.P. Operations	*	3	111,126	125,191	125,192	*	*	*	*	*
Director/V.P. Engineering	*	3	115,460	129,525	128,071	*	*	*	*	*
Engineering Manager	*	5	87,444	111,748	105,975	103,070	109,089	107,627	*	*
Distribution Engineer	*	*	*	*	*	*	*	*	*	*
Engineering Supervisor	*	7	69,790	100,013	89,777	86,272	94,035	90,529	*	*
Operations Manager or Superintendent	*	8	86,727	110,008	101,762	98,239	106,123	100,531	5	7
Control Centre Supervisor	*	5	76,519	99,614	92,799	90,002	97,365	91,360	*	*
Meter Shop Supervisor	*	5	76,350	97,266	88,483	86,398	90,230	90,002	*	*
Line Supervisor	*	21	74,993	96,254	90,260	89,125	90,222	89,460	5	7
Purchasing/Procurement Manager	*	5	72,921	92,624	85,059	81,439	86,113	84,348	*	*
Stores/Inventory Control Supervisor	*	*	*	*	*	*	*	*	*	*
Executive Assistant (to President)	*	8	56,003	68,949	69,526	65,212	72,629	68,500	4	5
Administrative Assistant	*	7	47,095	60,940	58,616	*	*	*	*	*
Director/VP Finance/CFO	*	5	116,901	151,377	145,080	133,935	141,370	139,254	*	*
Controller/Manager Finance	*	5	83,930	104,376	100,410	95,244	105,096	99,930	*	*
General Accounting Manager	*	3	83,045	112,008	101,432	*	*	*	*	*
Accounting Supervisor	*	*	*	*	*	*	*	*	*	*
Billing Supervisor	*	6	67,842	85,768	77,753	73,930	81,496	74,911	*	*
Director or VP, Customer Service	*	*	*	*	*	*	*	*	*	*
Manager, Customer Service	*	4	79,336	106,205	94,198	89,598	99,190	94,591	5	8
Customer Service Supervisor	*	6	67,000	82,218	74,678	70,712	81,930	71,989	*	*
Financial/Business Analyst	*	4	67,970	86,783	77,112	75,433	79,605	77,926	*	*
Director or VP, Regulatory Affairs	*	*	*	*	*	*	*	*	*	*
Manager, Regulatory Affairs	*	3	76,437	104,403	94,765	*	*	*	*	*

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
Settlement/Rate Analyst	*	3	63,967	*	73,835	*	*	*	*	*
Conservation & DM Officer	*	4	71,149	85,522	85,522	81,744	89,173	85,394	*	*
I.S. Director/VP	*	3	100,922	124,316	117,342	*	*	*	*	*
I.S. Manager	*	*	*	*	*	*	*	*	*	*
I.S. Supervisor/Computer Operations	*	3	77,073	*	92,015	*	*	*	*	*
Systems Administrator/Apps Support	*	5	68,284	84,037	83,747	79,561	85,879	81,693	*	*
Human Resources Director/VP	*	3	*	*	130,645	*	*	*	*	*
Human Resources Manager	*	4	81,803	105,518	94,995	88,587	101,880	95,472	*	*
Human Resources Generalist/Officer	*	*	*	*	*	*	*	*	*	*
Human Resources Assistant/Coord.	*	*	*	*	*	*	*	*	*	*
Manager Health & Safety/Loss Control	*	6	74,754	90,150	88,454	88,067	95,412	91,746	*	*

Compensation Analysis: By Customer Size
Table 7: Customer Size – LDCs (80,001 to 120,000 Customers)

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
President/CEO/GM	*	*	*	*	*	*	*	*	*	*
V.P. Operations & Engineering/COO	*	*	*	*	*	*	*	*	*	*
Director/V.P. Operations	*	*	*	*	*	*	*	*	*	*
Director/V.P. Engineering	*	*	*	*	*	*	*	*	*	*
Engineering Manager	3	4	95,054	114,097	105,688	*	*	*	*	*
Distribution Engineer	*	*	*	*	*	*	*	*	*	*
Engineering Supervisor	*	*	*	*	*	*	*	*	*	*
Operations Manager or Superintendent	*	*	*	*	*	*	*	*	*	*
Control Centre Supervisor	3	3	81,250	92,762	86,837	*	*	*	*	*
Meter Shop Supervisor	3	3	80,198	88,771	88,772	*	*	*	*	*
Line Supervisor	3	15	80,198	91,470	88,814	*	*	*	*	*
Purchasing/Procurement Manager	3	3	86,162	104,459	100,103	*	*	*	*	*
Stores/Inventory Control Supervisor	3	3	69,034	81,188	81,188	*	*	*	*	*
Executive Assistant (to President)	3	3	67,722	78,534	78,548	*	*	*	*	*
Administrative Assistant	3	6	60,224	69,729	65,305	*	*	*	*	*
Director/VP Finance/CFO	3	3	128,114	164,681	156,153	*	*	*	*	*
Controller/Manager Finance	*	*	*	*	*	*	*	*	*	*
General Accounting Manager	3	3	83,705	101,583	91,126	*	*	*	*	*
Accounting Supervisor	*	*	*	*	*	*	*	*	*	*
Billing Supervisor	*	*	*	*	*	*	*	*	*	*
Director or VP, Customer Service	3	3	*	135,188	130,165	*	*	*	*	*
Manager, Customer Service	*	*	*	*	*	*	*	*	*	*
Customer Service Supervisor	3	4	70,275	81,654	80,709	*	*	*	*	*
Financial/Business Analyst	*	*	*	*	*	*	*	*	*	*
Director or VP, Regulatory Affairs	*	*	*	*	*	*	*	*	*	*
Manager, Regulatory Affairs	*	*	*	*	*	*	*	*	*	*

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
Settlement/Rate Analyst	3	4	65,162	75,904	74,489	*	*	*	*	*
Conservation & DM Officer	*	*	*	*	*	*	*	*	*	*
I.S. Director/VP	3	3	101,989	123,942	119,519	*	*	*	*	*
I.S. Manager	*	*	*	*	*	*	*	*	*	*
I.S. Supervisor/Computer Operations	*	*	*	*	*	*	*	*	*	*
Systems Administrator/Apps Support	*	*	*	*	*	*	*	*	*	*
Human Resources Director/VP	*	*	*	*	*	*	*	*	*	*
Human Resources Manager	*	*	*	*	*	*	*	*	*	*
Human Resources Generalist/Officer	*	*	*	*	*	*	*	*	*	*
Human Resources Assistant/Coord.	*	*	*	*	*	*	*	*	*	*
Manager Health & Safety/Loss Control	3	3	82,227	95,579	95,579	*	*	*	*	*

Compensation Analysis: By Customer Size
Table 8: Customer Size – LDCs (120,001+ Customers)

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
President/CEO/GM	3	*	*	*	*	*	*	*	*	*
V.P. Operations & Engineering/COO	3	3	135,243	196,860	192,733	*	*	*	25	33
Director/V.P. Operations	3	3	114,704	157,959	149,273	*	*	*	*	*
Director/V.P. Engineering	3	3	112,266	152,139	141,461	*	*	*	*	*
Engineering Manager	3	4	88,741	118,503	110,396	*	*	*	*	*
Distribution Engineer	3	10	82,224	109,085	102,706	*	*	*	*	*
Engineering Supervisor	*	*	*	*	*	*	*	*	*	*
Operations Manager or Superintendent	3	8	85,885	114,940	105,558	*	*	*	*	*
Control Centre Supervisor	3	4	76,882	102,401	99,095	*	*	*	*	*
Meter Shop Supervisor	3	5	75,912	101,195	93,863	*	*	*	*	*
Line Supervisor	3	22	77,839	103,608	97,894	*	*	*	*	*
Purchasing/Procurement Manager	3	3	81,045	108,894	101,327	*	*	*	*	*
Stores/Inventory Control Supervisor	3	4	66,598	88,509	87,707	*	*	*	*	*
Executive Assistant (to President)	3	3	54,845	72,952	66,434	*	*	*	*	*
Administrative Assistant	3	15	52,508	70,030	63,653	*	*	*	*	*
Director/VP Finance/CFO	3	3	*	*	200,769	*	*	*	27	36
Controller/Manager Finance	3	3	98,705	136,396	126,267	*	*	*	*	*
General Accounting Manager	3	3	78,589	106,504	98,759	*	*	*	*	*
Accounting Supervisor	3	8	66,865	88,835	84,848	*	*	*	*	*
Billing Supervisor	3	5	67,561	89,709	84,459	*	*	*	*	*
Director or VP, Customer Service	3	3	103,793	143,644	134,577	*	*	*	*	*
Manager, Customer Service	*	*	*	*	*	*	*	*	*	*
Customer Service Supervisor	3	6	66,598	88,509	82,325	*	*	*	*	*
Financial/Business Analyst	*	*	*	*	*	*	*	*	*	*
Director or VP, Regulatory Affairs	3	3	108,585	150,233	138,604	*	*	*	*	*
Manager, Regulatory Affairs	3	3	82,873	111,174	*	*	*	*	*	*

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
Settlement/Rate Analyst	*	*	*	*	*	*	*	*	*	*
Conservation & DM Officer	3	3	79,974	107,541	99,974	*	*	*	*	*
I.S. Director/VP	3	3	113,633	163,014	153,461	*	*	*	*	*
I.S. Manager	3	3	96,340	129,477	119,265	*	*	*	*	*
I.S. Supervisor/Computer Operations	3	4	75,637	100,855	89,954	*	*	*	*	*
Systems Administrator/Apps Support	3	6	69,510	92,142	89,341	*	*	*	*	*
Human Resources Director/VP	3	3	105,160	151,821	141,996	*	*	*	*	*
Human Resources Manager	*	*	*	*	*	*	*	*	*	*
Human Resources Generalist/Officer	*	*	*	*	*	*	*	*	*	*
Human Resources Assistant/Coord.	3	7	54,366	72,353	66,553	*	*	*	*	*
Manager Health & Safety/Loss Control	3	5	87,012	117,828	102,718	*	*	*	*	*

Compensation Analysis: By Gross Revenue Grouping

Table 9: LDCs Gross Revenue Under $20 Million

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
President/CEO/GM	11	10	105,166	147,928	122,608	113,161	122,720	116,163	*	*
V.P. Operations & Engineering/COO	*	*	*	*	*	*	*	*	*	*
Director/V.P. Operations	*	*	*	*	*	*	*	*	*	*
Director/V.P. Engineering	*	*	*	*	*	*	*	*	*	*
Engineering Manager	11	3	85,921	106,353	*	*	*	*	*	*
Distribution Engineer	*	*	*	*	*	*	*	*	*	*
Engineering Supervisor	*	*	*	*	*	*	*	*	*	*
Operations Manager or Superintendent	11	7	80,433	107,265	94,002	91,273	99,476	95,000	*	*
Control Centre Supervisor	*	*	*	*	*	*	*	*	*	*
Meter Shop Supervisor	*	*	*	*	*	*	*	*	*	*
Line Supervisor	11	6	68,263	96,179	84,995	82,671	86,506	85,688	*	*
Purchasing/Procurement Manager	*	*	*	*	*	*	*	*	*	*
Stores/Inventory Control Supervisor	*	*	*	*	*	*	*	*	*	*
Executive Assistant (to President)	11	5*	*	*	59,329	53,055	64,900	57,350	*	*
Administrative Assistant	*	*	*	*	*	*	*	*	*	*
Director/VP Finance/CFO	11	6	90,261	126,475	104,510	88,042	121,330	93,712	*	*
Controller/Manager Finance	11	4	84,351	*	89,975	85,259	92,378	87,663	*	*
General Accounting Manager	*	*	*	*	*	*	*	*	*	*
Accounting Supervisor	*	*	*	*	*	*	*	*	*	*
Billing Supervisor	*	*	*	*	*	*	*	*	*	*
Director or VP, Customer Service	*	*	*	*	*	*	*	*	*	*
Manager, Customer Service	11	4	*	*	77,720	63,614	90,465	76,360	*	*
Customer Service Supervisor	11	4	*	*	66,303	59,768	74,031	67,496	*	*
Financial/Business Analyst	11	3	56,844	79,533	*	*	*	*	*	*
Director or VP, Regulatory Affairs	*	*	*	*	*	*	*	*	*	*
Manager, Regulatory Affairs	*	*	*	*	*	*	*	*	*	*

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
Settlement/Rate Analyst	*	*	*	*	*	*	*	*	*	*
Conservation & DM Officer	*	*	*	*	*	*	*	*	*	*
I.S. Director/VP	*	*	*	*	*	*	*	*	*	*
I.S. Manager	*	*	*	*	*	*	*	*	*	*
I.S. Supervisor/Computer Operations	*	*	*	*	*	*	*	*	*	*
Systems Administrator/Apps Support	*	*	*	*	*	*	*	*	*	*
Human Resources Director/VP	*	*	*	*	*	*	*	*	*	*
Human Resources Manager	*	*	*	*	*	*	*	*	*	*
Human Resources Generalist/Officer	*	*	*	*	*	*	*	*	*	*
Human Resources Assistant/Coord.	*	*	*	*	*	*	*	*	*	*
Manager Health & Safety/Loss Control	*	*	*	*	*	*	*	*	*	*

Compensation Analysis: By Gross Revenue Grouping

Table 10: LDCs Gross Revenue $20,000,001 to $50,000,000 Million

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
President/CEO/GM	10	10	135,579	158,736	149,351	139,854	154,547	145,900	*	*
V.P. Operations & Engineering/COO	10	5	95,763	114,474	114,318	110,849	118,450	115,000	*	*
Director/V.P. Operations	*	*	*	*	*	*	*	*	*	*
Director/V.P. Engineering	*	*	*	*	*	*	*	*	*	*
Engineering Manager	10	3	76,454	94,441	92,933	*	*	*	*	*
Distribution Engineer	*	*	*	*	*	*	*	*	*	*
Engineering Supervisor	*	*	*	*	*	*	*	*	*	*
Operations Manager or Superintendent	10	6	76,203	93,761	93,541	88,660	98,230	94,200	*	*
Control Centre Supervisor	*	*	*	*	*	*	*	*	*	*
Meter Shop Supervisor	*	*	*	*	*	*	*	*	*	*
Line Supervisor	10	9	74,611	88,674	86,046	84,419	87,870	86,546	*	*
Purchasing/Procurement Manager	*	*	*	*	*	*	*	*	*	*
Stores/Inventory Control Supervisor	*	*	*	*	*	*	*	*	*	*
Executive Assistant (to President)	10	3	*	*	68,365	*	*	*	*	*
Administrative Assistant	10	3	47,339	56,755	54,040	*	*	*	*	*
Director/VP Finance/CFO	10	8	99,418	118,155	110,319	105,137	115,296	109,060	*	*
Controller/Manager Finance	10	4	*	*	88,129	85,903	98,657	96,431	*	*
General Accounting Manager	*	*	*	*	*	*	*	*	*	*
Accounting Supervisor	10	3	*	*	78,227	*	*	*	*	*
Billing Supervisor	*	*	*	*	*	*	*	*	*	*
Director or VP, Customer Service	10	3	*	*	104,681	*	*	*	*	*
Manager, Customer Service	*	*	*	*	*	*	*	*	*	*
Customer Service Supervisor	*	*	*	*	*	*	*	*	*	*
Financial/Business Analyst	*	*	*	*	*	*	*	*	*	*
Director or VP, Regulatory Affairs	*	*	*	*	*	*	*	*	*	*
Manager, Regulatory Affairs	*	*	*	*	*	*	*	*	*	*

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
Settlement/Rate Analyst	*	*	*	*	*	*	*	*	*	*
Conservation & DM Officer	10	3	*	*	63,588	*	*	*	*	*
I.S. Director/VP	*	*	*	*	*	*	*	*	*	*
I.S. Manager	*	*	*	*	*	*	*	*	*	*
I.S. Supervisor/Computer Operations	*	*	*	*	*	*	*	*	*	*
Systems Administrator/Apps Support	*	*	*	*	*	*	*	*	*	*
Human Resources Director/VP	*	*	*	*	*	*	*	*	*	*
Human Resources Manager	10	3	*	*	84,360	*	*	*	*	*
Human Resources Generalist/Officer	*	*	*	*	*	*	*	*	*	*
Human Resources Assistant/Coord.	*	*	*	*	*	*	*	*	*	*
Manager Health & Safety/Loss Control	*	*	*	*	*	*	*	*	*	*

Compensation Analysis: By Gross Revenue Grouping

Table 11: LDCs Gross Revenue $50,000,001 to $100,000,000 Million

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
President/CEO/GM	10	8	120,830	161,795	161,131	149,509	161,510	155,824	13	15
V.P. Operations & Engineering/COO	10	5	113,581	136,967	135,300	131,943	139,564	133,397	*	*
Director/V.P. Operations	10	4	97,681	117,018	108,300	*	*	*	*	*
Director/V.P. Engineering	10	4	104,788	123,432	122,014	113,499	129,994	121,479	*	*
Engineering Manager	10	6	85,016	107,959	99,900	95,057	106,487	97,149	*	*
Distribution Engineer	10	4	71,899	100,203	90,089	*	*	*	*	*
Engineering Supervisor	10	4	74,742	98,491	96,444	87,104	101,243	91,904	*	*
Operations Manager or Superintendent	10	10	82,370	102,137	97,102	92,778	100,531	94,870	4	4
Control Centre Supervisor	10	3	*	94,626	94,626	*	*	*	*	*
Meter Shop Supervisor	10	6	73,773	91,157	88,960	83,626	91,833	90,306	*	*
Line Supervisor	10	16	73,621	92,496	88,065	84,638	90,780	88,002	*	*
Purchasing/Procurement Manager	10	3	72,045	88,021	85,800	*	*	*	*	*
Stores/Inventory Control Supervisor	10	3	60,815	77,377	76,651	*	*	*	*	*
Executive Assistant (to President)	10	8	54,289	66,426	66,087	63,085	71,049	64,592	*	*
Administrative Assistant	10	5	42,205	54,333	51,094	*	*	*	*	*
Director/VP Finance/CFO	10	9	228,792	129,947	129,942	114,955	133,935	131,943	5	5
Controller/Manager Finance	10	6	76,274	101,285	95,873	89,747	103,977	97,851	*	*
General Accounting Manager	*	*	*	*	*	*	*	*	*	*
Accounting Supervisor	*	*	*	*	*	*	*	*	*	*
Billing Supervisor	10	3	64,275	78,496	73,736	*	*	*	*	*
Director or VP, Customer Service	10	3	91,498	119,287	119,287	*	*	*	*	*
Manager, Customer Service	10	5	77,696	100,769	100,769	99,346	107,066	102,402	4	4
Customer Service Supervisor	10	7	60,772	76,958	74,756	68,819	80,892	75,000	*	*
Financial/Business Analyst	10	9	61,877	78,794	72,741	60,723	82,292	71,198	*	*
Director or VP, Regulatory Affairs	*	*	*	*	*	*	*	*	*	*
Manager, Regulatory Affairs	10	5	64,919	85,337	82,418	73,752	91,100	79,089	*	*

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
Settlement/Rate Analyst	10	7	65,396	81,850	77,836	72,569	80,480	77,000	*	*
Conservation & DM Officer	10	6	59,868	73,065	66,144	54,330	78,835	66,965	*	*
I.S. Director/VP	*	*	*	*	*	*	*	*	*	*
I.S. Manager	10	7	72,647	94,444	89,316	81,170	101,467	88,551	*	*
I.S. Supervisor/Computer Operations	*	*	*	*	*	*	*	*	*	*
Systems Administrator/Apps Support	10	7	59,196	75,223	72,849	71,828	78,833	75,000	*	*
Human Resources Director/VP	*	*	*	*	*	*	*	*	*	*
Human Resources Manager	*	*	*	*	*	*	*	*	*	*
Human Resources Generalist/Officer	10	3	59,722	76,113	69,562	*	*	*	*	*
Human Resources Assistant/Coord.	*	*	*	*	*	*	*	*	*	*
Manager Health & Safety/Loss Control	10	3	73,690	91,996	88,513	*	*	*	*	*

Compensation Analysis: By Gross Revenue Grouping

Table 12: LDCs Gross Revenue $100,000,001 to $200,000,000 Million

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
President/CEO/GM	11	9	148,012	191,802	182,385	174,900	183,860	181,200	17	20
V.P. Operations & Engineering/COO	11	6	123,651	157,931	137,697	129,781	145,359	137,846	14	17
Director/V.P. Operations	11	7	109,779	134,573	127,163	119,282	133,918	128,454	11	11
Director/V.P. Engineering	11	4	115,115	134,162	126,943	123,973	129,017	126,046	*	*
Engineering Manager	11	8	88,598	113,587	108,231	105,107	110,844	106,774	*	*
Distribution Engineer	11	4	77,913	97,781	86,280	*	*	*	*	*
Engineering Supervisor	11	10	72,487	94,837	85,496	82,563	87,674	87,178	4	7
Operations Manager or Superintendent	11	11	86,054	109,490	102,843	96,408	110,178	100,070	5	6
Control Centre Supervisor	11	6	79,714	100,818	94,122	86,583	99,549	94,363	*	*
Meter Shop Supervisor	11	8	76,968	96,729	90,711	86,382	95,125	88,535	*	*
Line Supervisor	11	32	75,929	95,892	89,790	85,987	90,681	89,460	5	6
Purchasing/Procurement Manager	11	8	72,499	92,407	86,001	83,434	89,423	85,582	4	6
Stores/Inventory Control Supervisor	*	*	*	*	*	*	*	*	*	*
Executive Assistant (to President)	11	12	56,566	70,551	69,875	65,675	72,978	71,647	4	4
Administrative Assistant	11	12	48,812	60,088	59,267	57,001	60,606	59,223	*	*
Director/VP Finance/CFO	11	9	110,425	142,798	137,247	130,625	141,370	139,254	11	14
Controller/Manager Finance	11	6	81,382	102,939	97,280	94,075	102,385	96,639	6	7
General Accounting Manager	11	6	76,998	99,644	91,186	83,563	98,744	89,234	5	5
Accounting Supervisor	*	*	*	*	*	*	*	*	*	*
Billing Supervisor	11	7	68,308	87,632	80,953	76,071	85,204	80,524	4	5
Director or VP, Customer Service	11	5	95,733	117,146	112,119	107,212	114,915	113,300	*	*
Manager, Customer Service	11	5	78,474	103,265	93,188	89,150	97,370	91,811	5	7
Customer Service Supervisor	11	8	63,785	81,856	78,087	73,880	81,445	79,772	5	6
Financial/Business Analyst	11	10	65,952	83,156	75,128	71,581	78,830	76,491	4	5
Director or VP, Regulatory Affairs	11	3	102,087	143,290	131,426	*	*	*	*	*
Manager, Regulatory Affairs	11	7	72,503	96,328	88,003	80,493	91,039	86,946	5	6

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
Settlement/Rate Analyst	11	5	68,161	82,759	79,690	70,012	84,261	79,552	5	5
Conservation & DM Officer	11	7	68,868	84,131	81,648	76,005	85,394	82,410	*	*
I.S. Director/VP	11	6	101,065	124,725	120,393	118,502	120,466	118,615	11	13
I.S. Manager	11	4	72,268	89,268	83,875	80,719	89,314	86,158	*	*
I.S. Supervisor/Computer Operations	11	3	77,073	*	92,015	*	*	*	*	*
Systems Administrator/Apps Support	11	16	63,803	81,034	82,203	76,192	87,463	81,081	4	4
Human Resources Director/VP	11	4	110,520	103,594	123,356	118,264	130,899	125,807	13	16
Human Resources Manager	11	5	79,557	101,971	94,262	90,000	100,944	91,332	6	7
Human Resources Generalist/Officer	11	5	56,888	73,082	66,413	64,343	68,801	66,731	*	*
Human Resources Assistant/Coord.	11	4	50,613	67,777	57,176	*	*	*	*	*
Manager Health & Safety/Loss Control	11	9	73,178	88,981	87,859	84,280	93,490	91,332	5	6

Compensation Analysis: By Gross Revenue Grouping

Table 13: LDCs Gross Revenue Over $200,000,001 Million

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
President/CEO/GM	5	3	176,923	222,942	257,418	*	*	*	32	35
V.P. Operations & Engineering/COO	5	5	143,909	192,266	186,348	175,275	179,795	178,269	26	32
Director/V.P. Operations	5	4	115,888	154,964	145,133	132,263	147,888	135,019	15	22
Director/V.P. Engineering	5	4	109,580	145,125	132,971	112,035	145,759	124,824	15	20
Engineering Manager	5	7	91,279	115,820	107,083	107,827	115,339	108,022	10	14
Distribution Engineer	5	10	82,224	109,085	102,706	*	*	*	*	*
Engineering Supervisor	*	*	*	*	*	*	*	*	*	*
Operations Manager or Superintendent	5	9	86,211	112,846	103,881	98,422	108,863	103,403	10	13
Control Centre Supervisor	5	6	77,915	98,914	94,595	89,100	98,469	93,516	10	12
Meter Shop Supervisor	5	7	77,458	96,612	92,213	85,425	98,521	95,878	8	9
Line Supervisor	5	28	78,615	99,678	95,165	92,248	97,136	96,260	10	12
Purchasing/Procurement Manager	5	5	84,374	108,079	100,926	93,500	111,583	107,147	11	14
Stores/Inventory Control Supervisor	5	6	68,650	85,908	85,427	78,998	92,030	91,021	7	9
Executive Assistant (to President)	5	5	61,954	76,412	72,509	64,750	80,995	71,541	8	9
Administrative Assistant	5	18	57,873	71,650	65,170	63,012	64,750	63,196	6	7
Director/VP Finance/CFO	5	5	149,476	199,215	191,170	175,275	202,044	178,269	28	34
Controller/Manager Finance	5	5	101,968	134,438	125,707	113,400	132,710	117,025	14	16
General Accounting Manager	5	5	81,426	104,920	96,980	90,100	98,521	94,500	12	13
Accounting Supervisor	5	12	68,810	86,103	82,619	72,990	85,560	84,686	7	9
Billing Supervisor	5	6	69,252	88,396	83,825	81,130	84,955	82,260	*	*
Director or VP, Customer Service	5	5	103,225	143,559	135,862	112,800	159,805	136,100	*	*
Manager, Customer Service	5	4	90,533	119,221	103,238	90,063	115,386	102,211	12	15
Customer Service Supervisor	5	9	69,394	86,188	81,910	78,118	84,457	81,875	8	9
Financial/Business Analyst	5	11	68,965	89,593	87,278	84,903	89,793	87,556	*	*
Director or VP, Regulatory Affairs	5	5	109,635	142,741	133,110	117,025	136,100	132,710	15	20
Manager, Regulatory Affairs	5	3	82,873	111,174	*	*	*	*	*	*

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
Settlement/Rate Analyst	5	5	68,489	80,064	78,649	*	*	*	6	7
Conservation & DM Officer	5	4	85,361	111,677	103,181	96,774	112,950	106,544	10	11
I.S. Director/VP	5	5	110,376	148,434	140,048	132,710	150,416	133,806	17	22
I.S. Manager	5	5	94,052	123,749	113,669	105,331	119,185	110,848	13	18
I.S. Supervisor/Computer Operations	5	4	75,637	100,855	89,954	*	*	*	*	*
Systems Administrator/Apps Support	5	7	69,229	89,117	87,016	84,582	90,430	87,997	*	*
Human Resources Director/VP	5	5	105,292	141,718	133,169	107,827	152,891	132,710	17	22
Human Resources Manager	5	4	89,052	127,150	107,682	*	*	*	13	18
Human Resources Generalist/Officer	5	10	68,964	94,222	86,162	77,617	92,069	83,523	9	9
Human Resources Assistant/Coord.	5	9	55,355	68,976	64,271	61,402	66,540	61,973	5	7
Manager Health & Safety/Loss Control	5	7	86,831	109,644	100,578	89,897	107,147	97,758	11	15

Compensation Analysis: By District

Table 14: LDCs in District 'Georgian Bay'

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
President/CEO/GM	8	7	135,579	163,562	149,469	136,219	153,150	141,500	*	*
V.P. Operations & Engineering/COO	8	3	*	*	113,650	*	*	*	*	*
Director/V.P. Operations	*	*	*	*	*	*	*	*	*	*
Director/V.P. Engineering	*	*	*	*	*	*	*	*	*	*
Engineering Manager	8	3	83,824	98,158	96,650	*	*	*	*	*
Distribution Engineer	*	*	*	*	*	*	*	*	*	*
Engineering Supervisor	*	*	*	*	*	*	*	*	*	*
Operations Manager or Superintendent	8	6	78,878	94,041	93,681	88,660	98,230	94,200	*	*
Control Centre Supervisor	*	*	*	*	*	*	*	*	*	*
Meter Shop Supervisor	*	*	*	*	*	*	*	*	*	*
Line Supervisor	8	5	*	*	85,692*	82,750	88,727	85,785	*	*
Purchasing/Procurement Manager	*	*	*	*	*	*	*	*	*	*
Stores/Inventory Control Supervisor	*	*	*	*	*	*	*	*	*	*
Executive Assistant (to President)	*	*	*	*	*	*	*	*	*	*
Administrative Assistant	*	*	*	*	*	*	*	*	*	*
Director/VP Finance/CFO	8	6	101,431	122,955	111,710	107,625	116,368	109,060	*	*
Controller/Manager Finance	8	4	*	*	88,580	85,903	99,439	96,761	*	*
General Accounting Manager	*	*	*	*	*	*	*	*	*	*
Accounting Supervisor	*	*	*	*	*	*	*	*	*	*
Billing Supervisor	*	*	*	*	*	*	*	*	*	*
Director or VP, Customer Service	*	*	*	*	*	*	*	*	*	*
Manager, Customer Service	*	*	*	*	*	*	*	*	*	*
Customer Service Supervisor	*	*	*	*	*	*	*	*	*	*
Financial/Business Analyst	*	*	*	*	*	*	*	*	*	*
Director or VP, Regulatory Affairs	*	*	*	*	*	*	*	*	*	*
Manager, Regulatory Affairs	*	*	*	*	*	*	*	*	*	*

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
Settlement/Rate Analyst	*	*	*	*	*	*	*	*	*	*
Conservation & DM Officer	*	*	*	*	*	*	*	*	*	*
I.S. Director/VP	*	*	*	*	*	*	*	*	*	*
I.S. Manager	*	*	*	*	*	*	*	*	*	*
I.S. Supervisor/Computer Operations	*	*	*	*	*	*	*	*	*	*
Systems Administrator/Apps Support	*	*	*	*	*	*	*	*	*	*
Human Resources Director/VP	*	*	*	*	*	*	*	*	*	*
Human Resources Manager	8	3	*	*	84,360	*	*	*	*	*
Human Resources Generalist/Officer	*	*	*	*	*	*	*	*	*	*
Human Resources Assistant/Coord.	*	*	*	*	*	*	*	*	*	*
Manager Health & Safety/Loss Control	*	*	*	*	*	*	*	*	*	*

Compensation Analysis: By District

Table 15: LDCs in District 'Northeastern'

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
President/CEO/GM	9	8	135,002	183,728	166,645	153,901	176,675	163,742	22	22
V.P. Operations & Engineering/COO	9	6	115,823	159,835	151,118	135,221	170,330	143,603	20	24
Director/V.P. Operations	*	*	*	*	*	*	*	*	*	*
Director/V.P. Engineering	*	*	*	*	*	*	*	*	*	*
Engineering Manager	9	7	88,175	115,986	107,053	100,702	115,810	110,178	9	10
Distribution Engineer	9	7	74,027	101,841	90,719	*	*	*	*	*
Engineering Supervisor	9	4	81,361	107,311	99,773	*	*	*	*	*
Operations Manager or Superintendent	9	11	85,566	112,241	100,073	96,329	108,512	100,930	7	8
Control Centre Supervisor	9	6	80,556	102,464	95,101	90,306	98,469	97,365	*	*
Meter Shop Supervisor	9	6	78,020	97,295	92,944	90,610	95,878	93,380	*	*
Line Supervisor	9	23	76,158	99,318	90,726	86,920	94,254	90,610	*	*
Purchasing/Procurement Manager	9	1	91,543	107,147	107,147	85,025	108,710	97,738	10	12
Stores/Inventory Control Supervisor	9	4	63,208	83,556	82,754	*	*	*	*	*
Executive Assistant (to President)	9	7	57,810	73,705	69,712	64,080	76,661	71,197	*	*
Administrative Assistant	9	16	51,996	66,400	63,113	59,719	63,859	61,919	*	*
Director/VP Finance/CFO	9	7	122,668	162,864	143,449	131,820	159,036	133,397	21	26
Controller/Manager Finance	9	8	82,612	111,390	102,365	97,970	111,050	102,402	9	10
General Accounting Manager	9	3	82,639	107,362	101,062	*	*	*	*	*
Accounting Supervisor	9	6	64,725	85,198	81,399	79,073	84,905	82,578	*	*
Billing Supervisor	*	*	*	*	*	*	*	*	*	*
Director or VP, Customer Service	9	4	97,637	141,257	132,688	123,376	142,770	133,458	*	*
Manager, Customer Service	9	8	77,490	99,464	90,952	87,467	98,628	90,086	9	10
Customer Service Supervisor	9	5	65,330	85,426	81,698	80,350	82,521	81,173	*	*
Financial/Business Analyst	9	12	60,018	80,418	76,499	71,198	82,249	81,772	*	*
Director or VP, Regulatory Affairs	*	*	*	*	*	*	*	*	*	*
Manager, Regulatory Affairs	9	4	72,724	100,655	93,642	87,358	97,323	91,039	*	*

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
Settlement/Rate Analyst	*	*	*	*	*	*	*	*	*	*
Conservation & DM Officer	9	4	71,556	99,111	85,920	73,463	101,378	88,920	*	*
I.S. Director/VP	9	3	104,100	143,542	129,380	*	*	*	18	23
I.S. Manager	9	5	78,340	110,939	97,998	83,250	102,402	89,150	10	13
I.S. Supervisor/Computer Operations	*	*	*	*	*	*	*	*	*	*
Systems Administrator/Apps Support	9	8	60,258	81,361	79,260	77,639	81,877	80,256	*	*
Human Resources Director/VP	9	3	96,814	98,362	124,492	*	*	*	18	23
Human Resources Manager	9	4	85,215	125,289	109,484	*	*	*	*	*
Human Resources Generalist/Officer	9	9	58,744	87,100	73,667	68,223	80,318	74,875	*	*
Human Resources Assistant/Coord.	9	7	52,976	69,005	60,226	*	*	*	*	*
Manager Health & Safety/Loss Control	9	4	89,467	117,555	106,855	101,144	110,485	104,775	13	17

Compensation Analysis: By District

Table 16: LDCs in District 'Niagara Grand'

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
President/CEO/GM	12	11	122,637	149,771	144,879	127,938	158,807	142,538	*	*
V.P. Operations & Engineering/COO	12	5	114,134	126,867	123,785	119,790	131,943	125,080	*	*
Director/V.P. Operations	12	5	107,966	127,823	122,920	115,465	128,454	123,560	*	*
Director/V.P. Engineering	12	6	110,566	130,423	118,723	117,489	127,014	123,835	*	*
Engineering Manager	12	4	85,029	102,719	98,911	92,368	105,513	98,970	*	*
Distribution Engineer	*	*	*	*	*	*	*	*	*	*
Engineering Supervisor	12	6	72,930	93,128	87,985	86,362	89,477	87,854	*	*
Operations Manager or Superintendent	12	10	83,100	104,621	98,154	94,968	99,008	96,740	*	*
Control Centre Supervisor	*	*	*	*	*	*	*	*	*	*
Meter Shop Supervisor	12	8	73,766	91,099	86,671	81,065	90,733	86,619	*	*
Line Supervisor	12	29	72,959	91,093	86,340	84,570	87,903	85,925	*	*
Purchasing/Procurement Manager	12	7	72,863	92,626	87,381	79,495	96,025	84,348	*	*
Stores/Inventory Control Supervisor	*	*	*	*	*	*	*	*	*	*
Executive Assistant (to President)	12	10	53,432	67,781	65,630	60,941	68,500	66,387	*	*
Administrative Assistant	12	7	45,955	55,676	54,762	*	*	*	*	*
Director/VP Finance/CFO	12	10	96,532	121,104	116,729	102,216	131,207	114,580	*	*
Controller/Manager Finance	12	3	79,250	*	91,198	*	*	*	*	*
General Accounting Manager	*	*	*	*	*	*	*	*	*	*
Accounting Supervisor	*	*	*	*	*	*	*	*	*	*
Billing Supervisor	12	7	68,587	85,538	79,696	76,456	82,833	80,524	*	*
Director or VP, Customer Service	12	4	97,516	115,672	110,233	101,498	117,214	108,479	*	*
Manager, Customer Service	12	4	74,385	99,982	88,747	85,116	98,937	95,306	*	*
Customer Service Supervisor	12	11	63,241	80,283	70,240	61,761	77,989	72,608	*	*
Financial/Business Analyst	12	12	63,231	79,894	77,227	71,581	83,584	78,830	*	*
Director or VP, Regulatory Affairs	*	*	*	*	*	*	*	*	*	*
Manager, Regulatory Affairs	12	4	75,438	95,649	89,813	75,546	102,012	87,745	*	*

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
Settlement/Rate Analyst	12	5	62,906	77,443	73,614	*	*	*	*	*
Conservation & DM Officer	12	7	63,726	77,105	72,566	62,369	83,379	80,778	*	*
I.S. Director/VP	12	3	101,602	117,410	117,411	*	*	*	*	*
I.S. Manager	12	5	70,855	89,048	84,628	73,400	89,804	88,551	*	*
I.S. Supervisor/Computer Operations	*	*	*	*	*	*	*	*	*	*
Systems Administrator/Apps Support	12	10	60,665	78,708	74,375	64,400	81,081	79,166	*	*
Human Resources Director/VP	*	*	*	*	*	*	*	*	*	*
Human Resources Manager	*	*	*	*	*	*	*	*	*	*
Human Resources Generalist/Officer	*	*	*	*	*	*	*	*	*	*
Human Resources Assistant/Coord.	12	4	*	*	55,925	*	*	*	*	*
Manager Health & Safety/Loss Control	12	6	69,679	90,191	82,989	76,227	90,856	86,461	*	*

Compensation Analysis: By District

Table 17: LDCs in District 'North Western'

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
President/CEO/GM	4	4	*	*	124,713	109,526	133,629	118,442	*	*
V.P. Operations & Engineering/COO	*	*	*	*	*	*	*	*	*	*
Director/V.P. Operations	*	*	*	*	*	*	*	*	*	*
Director/V.P. Engineering	*	*	*	*	*	*	*	*	*	*
Engineering Manager	*	*	*	*	*	*	*	*	*	*
Distribution Engineer	*	*	*	*	*	*	*	*	*	*
Engineering Supervisor	*	*	*	*	*	*	*	*	*	*
Operations Manager or Superintendent	4	4	78,605	*	94,359	*	*	*	*	*
Control Centre Supervisor	*	*	*	*	*	*	*	*	*	*
Meter Shop Supervisor	*	*	*	*	*	*	*	*	*	*
Line Supervisor	*	*	*	*	*	*	*	*	*	*
Purchasing/Procurement Manager	*	*	*	*	*	*	*	*	*	*
Stores/Inventory Control Supervisor	*	*	*	*	*	*	*	*	*	*
Executive Assistant (to President)	*	*	*	*	*	*	*	*	*	*
Administrative Assistant	4	4	*	*	44,821	*	*	*	*	*
Director/VP Finance/CFO	*	*	*	*	*	*	*	*	*	*
Controller/Manager Finance	*	*	*	*	*	*	*	*	*	*
General Accounting Manager	*	*	*	*	*	*	*	*	*	*
Accounting Supervisor	*	*	*	*	*	*	*	*	*	*
Billing Supervisor	*	*	*	*	*	*	*	*	*	*
Director or VP, Customer Service	*	*	*	*	*	*	*	*	*	*
Manager, Customer Service	*	*	*	*	*	*	*	*	*	*
Customer Service Supervisor	*	*	*	*	*	*	*	*	*	*
Financial/Business Analyst	*	*	*	*	*	*	*	*	*	*
Director or VP, Regulatory Affairs	*	*	*	*	*	*	*	*	*	*
Manager, Regulatory Affairs	*	*	*	*	*	*	*	*	*	*

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
Settlement/Rate Analyst	*	*	*	*	*	*	*	*	*	*
Conservation & DM Officer	*	*	*	*	*	*	*	*	*	*
I.S. Director/VP	*	*	*	*	*	*	*	*	*	*
I.S. Manager	*	*	*	*	*	*	*	*	*	*
I.S. Supervisor/Computer Operations	*	*	*	*	*	*	*	*	*	*
Systems Administrator/Apps Support	*	*	*	*	*	*	*	*	*	*
Human Resources Director/VP	*	*	*	*	*	*	*	*	*	*
Human Resources Manager	*	*	*	*	*	*	*	*	*	*
Human Resources Generalist/Officer	*	*	*	*	*	*	*	*	*	*
Human Resources Assistant/Coord.	*	*	*	*	*	*	*	*	*	*
Manager Health & Safety/Loss Control	*	*	*	*	*	*	*	*	*	*

Compensation Analysis: By District

Table 18: LDCs in District 'Upper Canada'

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
President/CEO/GM	7	4	*	216,130	206,664	171,808	220,000	200,000	17	23
V.P. Operations & Engineering/COO	7	3	*	*	170,397	*	*	*	*	*
Director/V.P. Operations	7	4	119,844	144,254	144,615	*	*	*	*	*
Director/V.P. Engineering	7	3	122,567	143,447	139,945	*	*	*	*	*
Engineering Manager	7	5	87,803	119,918	109,019	105,698	111,145	107,825	6	8
Distribution Engineer	7	5	85,723	109,312	100,958	*	*	*	5	8
Engineering Supervisor	7	10	73,110	96,641	85,792	81,121	87,863	83,192	5	8
Operations Manager or Superintendent	7	7	86,867	111,860	104,033	93,300	111,583	102,067	5	7
Control Centre Supervisor	7	3	75,903	99,594	95,920	*	*	*	4	8
Meter Shop Supervisor	7	5	79,016	104,762	96,742	94,577	101,777	99,612	5	8
Line Supervisor	7	17	76,683	99,736	91,817	88,024	97,000	90,640	5	7
Purchasing/Procurement Manager	7	3	77,139	103,437	94,249	*	*	*	*	*
Stores/Inventory Control Supervisor	*	*	*	*	*	*	*	*	*	*
Executive Assistant (to President)	7	7	57,725	70,442	65,463	63,194	71,594	71,000	4	6
Administrative Assistant	*	*	*	*	*	*	*	*	*	*
Director/VP Finance/CFO	7	6	119,220	161,339	153,793	118,536	176,763	157,650	10	15
Controller/Manager Finance	7	5	93,879	122,965	112,420	93,300	108,292	104,030	7	9
General Accounting Manager	7	3	87,471	*	101,297	*	*	*	*	*
Accounting Supervisor	*	*	*	*	*	*	*	*	*	*
Billing Supervisor	7	6	67,446	87,923	80,568	72,183	91,507	83,122	*	*
Director or VP, Customer Service	*	*	*	*	*	*	*	*	*	*
Manager, Customer Service	7	5	86,486	119,397	100,848	87,687	107,600	104,650	6	9
Customer Service Supervisor	7	5	*	85,737	81,161	73,928	88,183	80,950	5	7
Financial/Business Analyst	7	5	69,825	90,743	77,273	69,348	83,758	75,833	5	7
Director or VP, Regulatory Affairs	7	3	112,693	154,053	143,200	*	*	*	*	*
Manager, Regulatory Affairs	7	4	72,137	95,283	88,093	81,406	93,397	86,710	5	7

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
Settlement/Rate Analyst	7	5	69,870	87,309	77,907	70,012	84,261	77,000	6	7
Conservation & DM Officer	7	3	*	80,878	77,481	*	*	*	*	*
I.S. Director/VP	*	*	*	*	*	*	*	*	*	*
I.S. Manager	*	*	*	*	*	*	*	*	*	*
I.S. Supervisor/Computer Operations	7	10	69,416	87,711	72,655	66,438	81,883	75,666	*	*
Systems Administrator/Apps Support	*	*	*	*	*	*	*	*	*	*
Human Resources Director/VP	*	*	*	*	*	*	*	*	*	*
Human Resources Manager	7	4	81,230	108,318	98,465	90,999	103,604	96,138	6	8
Human Resources Generalist/Officer	7	3	63,835	82,506	75,304	*	*	*	*	*
Human Resources Assistant/Coord.	*	*	*	*	*	*	*	*	*	*
Manager Health & Safety/Loss Control	7	5	78,175	95,810	95,048	*	*	*	6	7

Compensation Analysis: By District

Table 19: LDCs in District 'Western'

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
President/CEO/GM	7	6	146,986	179,425	179,702	157,432	200,129	181,240	22	30
V.P. Operations & Engineering/COO	7	5	126,345	158,163	143,366	122,532	169,125	139,050	23	27
Director/V.P. Operations	7	4	107,662	137,567	126,640	124,995	133,461	131,816	13	13
Director/V.P. Engineering	*	*	*	*	*	*	*	*	*	*
Engineering Manager	7	6	85,411	108,698	99,907	95,811	106,397	102,301	8	10
Distribution Engineer	*	*	*	*	*	*	*	*	*	*
Engineering Supervisor	*	*	*	*	*	*	*	*	*	*
Operations Manager or Superintendent	7	5	82,268	105,384	96,632	93,833	98,850	97,136	8	9
Control Centre Supervisor	7	3	80,638	98,594	96,179	*	*	*	*	*
Meter Shop Supervisor	7	3	74,325	88,235	86,745	*	*	*	*	*
Line Supervisor	7	13	75,301	92,838	88,702	85,413	91,005	89,893	7	8
Purchasing/Procurement Manager	7	3	69,873	85,559	81,203	*	*	*	*	*
Stores/Inventory Control Supervisor	7	3	65,193	78,462	79,130	*	*	*	*	*
Executive Assistant (to President)	7	6	60,065	75,535	70,410	64,803	75,383	68,915	4	5
Administrative Assistant	7	8	54,155	64,681	59,967	58,398	60,978	59,408	*	*
Director/VP Finance/CFO	7	7	115,971	144,440	138,827	122,790	158,463	135,960	18	22
Controller/Manager Finance	*	*	*	*	*	*	*	*	*	*
General Accounting Manager	7	5	71,876	88,837	84,665	82,596	90,100	83,165	*	*
Accounting Supervisor	7	8	63,519	80,653	74,536	*	*	*	*	*
Billing Supervisor	*	*	*	*	*	*	*	*	*	*
Director or VP, Customer Service	7	4	93,220	115,070	110,285	107,673	112,925	110,314	*	*
Manager, Customer Service	*	*	*	*	*	*	*	*	*	*
Customer Service Supervisor	7	7	62,519	80,762	77,181	75,434	78,917	77,170	4	6
Financial/Business Analyst	7	5	63,914	82,555	71,375	69,736	75,373	73,734	*	*
Director or VP, Regulatory Affairs	7	5	104,802	137,992	127,176	122,403	132,710	125,781	17	21
Manager, Regulatory Affairs	7	4	70,549	89,160	77,250	*	*	*	*	*

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
Settlement/Rate Analyst	7	3	70,671	83,971	82,462	*	*	*	*	*
Conservation & DM Officer	7	4	74,667	93,093	86,962	77,130	92,877	83,045	*	*
I.S. Director/VP	7	3	105,873	129,558	129,190	*	*	*	*	*
I.S. Manager	7	4	82,910	*	97,864	*	*	*	*	*
I.S. Supervisor/Computer Operations	7	4	72,352	95,045	84,879	*	*	*	*	*
Systems Administrator/Apps Support	7	4	64,257	79,322	85,203	*	*	*	*	*
Human Resources Director/VP	7	4	101,355	121,294	117,497	106,329	128,888	117,721	*	*
Human Resources Manager	*	*	*	*	*	*	*	*	*	*
Human Resources Generalist/Officer	*	*	*	*	*	*	*	*	*	*
Human Resources Assistant/Coord.	*	*	*	*	*	*	*	*	*	*
Manager Health & Safety/Loss Control	7	4	73,520	85,424	86,042	83,810	88,167	85,935	*	*

Compensation Analysis: By Employee Size

Table 20: LDCs 1 to 20 Employees

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
President/CEO/GM	9	8	101,779	125,176	114,322	106,540	119,490	114,509	*	*
V.P. Operations & Engineering/COO	*	*	*	*	*	*	*	*	*	*
Director/V.P. Operations	*	*	*	*	*	*	*	*	*	*
Director/V.P. Engineering	*	*	*	*	*	*	*	*	*	*
Engineering Manager	9	3	85,347	98,070	94,280	*	*	*	*	*
Distribution Engineer	*	*	*	*	*	*	*	*	*	*
Engineering Supervisor	*	*	*	*	*	*	*	*	*	*
Operations Manager or Superintendent	9	5	78,875	*	91,857	89,951	97,900	92,594	*	*
Control Centre Supervisor	*	*	*	*	*	*	*	*	*	*
Meter Shop Supervisor	*	*	*	*	*	*	*	*	*	*
Line Supervisor	*	*	*	*	*	*	*	*	*	*
Purchasing/Procurement Manager	*	*	*	*	*	*	*	*	*	*
Stores/Inventory Control Supervisor	*	*	*	*	*	*	*	*	*	*
Executive Assistant (to President)	*	*	*	*	*	*	*	*	*	*
Administrative Assistant	9	3	47,209	55,229	*	*	*	*	*	*
Director/VP Finance/CFO	9	3	*	*	87,165	*	*	*	*	*
Controller/Manager Finance	9	6	84,333	98,997	86,592	84,603	96,799	87,663	*	*
General Accounting Manager	*	*	*	*	*	*	*	*	*	*
Accounting Supervisor	*	*	*	*	*	*	*	*	*	*
Billing Supervisor	*	*	*	*	*	*	*	*	*	*
Director or VP, Customer Service	*	*	*	*	*	*	*	*	*	*
Manager, Customer Service	*	*	*	*	*	*	*	*	*	*
Customer Service Supervisor	*	*	*	*	*	*	*	*	*	*
Financial/Business Analyst	*	*	*	*	*	*	*	*	*	*
Director or VP, Regulatory Affairs	*	*	*	*	*	*	*	*	*	*
Manager, Regulatory Affairs	*	*	*	*	*	*	*	*	*	*

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
Settlement/Rate Analyst	*	*	*	*	*	*	*	*	*	*
Conservation & DM Officer	*	*	*	*	*	*	*	*	*	*
I.S. Director/VP	*	*	*	*	*	*	*	*	*	*
I.S. Manager	*	*	*	*	*	*	*	*	*	*
I.S. Supervisor/Computer Operations	*	*	*	*	*	*	*	*	*	*
Systems Administrator/Apps Support	*	*	*	*	*	*	*	*	*	*
Human Resources Director/VP	*	*	*	*	*	*	*	*	*	*
Human Resources Manager	*	*	*	*	*	*	*	*	*	*
Human Resources Generalist/Officer	*	*	*	*	*	*	*	*	*	*
Human Resources Assistant/Coord.	*	*	*	*	*	*	*	*	*	*
Manager Health & Safety/Loss Control	*	*	*	*	*	*	*	*	*	*

Compensation Analysis: By Employee Size

Table 21: LDCs 21 to 40 Employees

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
President/CEO/GM	9	9	121,585	156,403	144,220	139,435	155,197	141,500	*	*
V.P. Operations & Engineering/COO	9	6	98,073	123,606	118,440	111,887	119,455	116,725	*	*
Director/V.P. Operations	*	*	*	*	*	*	*	*	*	*
Director/V.P. Engineering	*	*	*	*	*	*	*	*	*	*
Engineering Manager	9	3	77,027	102,724	*	*	*	*	*	*
Distribution Engineer	*	*	*	*	*	*	*	*	*	*
Engineering Supervisor	*	*	*	*	*	*	*	*	*	*
Operations Manager or Superintendent	9	6	78,653	101,321	94,440	88,660	99,256	94,577	*	*
Control Centre Supervisor	*	*	*	*	*	*	*	*	*	*
Meter Shop Supervisor	*	*	*	*	*	*	*	*	*	*
Line Supervisor	9	10	71,581	88,801	83,909	81,570	86,080	84,419	*	*
Purchasing/Procurement Manager	*	*	*	*	*	*	*	*	*	*
Stores/Inventory Control Supervisor	*	*	*	*	*	*	*	*	*	*
Executive Assistant (to President)	9	4	*	*	65,804	61,436	75,306	70,938	*	*
Administrative Assistant	*	*	*	*	*	*	*	*	*	*
Director/VP Finance/CFO	9	8	95,479	120,708	108,526	98,251	115,296	107,750	*	*
Controller/Manager Finance	*	*	*	*	*	*	*	*	*	*
General Accounting Manager	*	*	*	*	*	*	*	*	*	*
Accounting Supervisor	9	4	66,587	88,383	78,932	74,360	82,535	77,964	*	*
Billing Supervisor	*	*	*	*	*	*	*	*	*	*
Director or VP, Customer Service	*	*	*	*	*	*	*	*	*	*
Manager, Customer Service	*	*	*	*	*	*	*	*	*	*
Customer Service Supervisor	9	4	*	*	65,027	61,367	65,406	61,746	*	*
Financial/Business Analyst	*	*	*	*	*	*	*	*	*	*
Director or VP, Regulatory Affairs	*	*	*	*	*	*	*	*	*	*
Manager, Regulatory Affairs	*	*	*	*	*	*	*	*	*	*

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
Settlement/Rate Analyst	*	*	*	*	*	*	*	*	*	*
Conservation & DM Officer	*	*	*	*	*	*	*	*	*	*
I.S. Director/VP	*	*	*	*	*	*	*	*	*	*
I.S. Manager	*	*	*	*	*	*	*	*	*	*
I.S. Supervisor/Computer Operations	*	*	*	*	*	*	*	*	*	*
Systems Administrator/Apps Support	*	*	*	*	*	*	*	*	*	*
Human Resources Director/VP	*	*	*	*	*	*	*	*	*	*
Human Resources Manager	*	*	*	*	*	*	*	*	*	*
Human Resources Generalist/Officer	*	*	*	*	*	*	*	*	*	*
Human Resources Assistant/Coord.	*	*	*	*	*	*	*	*	*	*
Manager Health & Safety/Loss Control	*	*	*	*	*	*	*	*	*	*

Compensation Analysis: By Employee Size

Table 22: LDCs 41 to 70 Employees

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
President/CEO/GM	11	8	128,085	170,160	163,269	142,538	157,019	150,300	*	*
V.P. Operations & Engineering/COO	11	3	*	*	131,159	*	*	*	*	*
Director/V.P. Operations	11	4	101,195	118,420	106,657	*	*	*	*	*
Director/V.P. Engineering	11	3	110,996	126,087	124,197	*	*	*	*	*
Engineering Manager	11	5	82,557	105,597	94,788	94,870	98,681	95,618	*	*
Distribution Engineer	*	*	*	*	*	*	*	*	*	*
Engineering Supervisor	11	3	84,236	102,760	96,030	*	*	*	*	*
Operations Manager or Superintendent	11	9	83,228	106,033	96,028	92,700	97,072	94,870	*	*
Control Centre Supervisor	*	*	*	*	*	*	*	*	*	*
Meter Shop Supervisor	*	4	69,752	89,699	83,800	81,065	84,185	81,450	*	*
Line Supervisor	*	11	74,585	96,385	88,703	86,700	91,288	87,570	*	*
Purchasing/Procurement Manager	*	*	*	*	*	*	*	*	*	*
Stores/Inventory Control Supervisor	*	*	*	*	*	*	*	*	*	*
Executive Assistant (to President)	11	8	55,093	68,870	67,447	63,655	71,310	67,950	*	*
Administrative Assistant	*	*	*	*	*	*	*	*	*	*
Director/VP Finance/CFO	11	9	104,073	131,617	128,077	110,120	140,789	129,000	*	*
Controller/Manager Finance	11	6	77,026	101,165	95,898	93,300	104,030	94,370	*	*
General Accounting Manager	11	3	80,445	102,809	92,425	*	*	*	*	*
Accounting Supervisor	*	*	*	*	*	*	*	*	*	*
Billing Supervisor	*	*	*	*	*	*	*	*	*	*
Director or VP, Customer Service	*	*	*	*	*	*	*	*	*	*
Manager, Customer Service	11	5	79,840	105,949	101,109	98,800	107,066	104,650	5	7
Customer Service Supervisor	11	6	58,995	78,299	74,866	71,359	79,736	74,150	*	*
Financial/Business Analyst	11	9	61,522	79,746	71,236	61,821	76,099	70,665	*	*
Director or VP, Regulatory Affairs	*	*	*	*	*	*	*	*	*	*
Manager, Regulatory Affairs	11	5	60,067	81,835	79,195	73,752	83,230	79,089	*	*

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
Settlement/Rate Analyst	11	3	69,330	*	80,580	*	*	*	*	*
Conservation & DM Officer	11	4	66,449	79,422	66,220	58,110	73,941	65,831	*	*
I.S. Director/VP	*	*	*	*	*	*	*	*	*	*
I.S. Manager	11	5	64,731	89,292	78,430	73,400	83,250	79,089	*	*
I.S. Supervisor/Computer Operations	*	*	*	*	*	*	*	*	*	*
Systems Administrator/Apps Support	11	5	56,030	74,573	67,941	64,400	73,093	70,562	*	*
Human Resources Director/VP	*	*	*	*	*	*	*	*	*	*
Human Resources Manager	11	3	*	*	88,360	*	*	*	*	*
Human Resources Generalist/Officer	*	*	*	*	*	*	*	*	*	*
Human Resources Assistant/Coord.	*	*	*	*	*	*	*	*	*	*
Manager Health & Safety/Loss Control	*	*	*	*	*	*	*	*	*	*

Compensation Analysis: By Employee Size

Table 23: LDCs 71 to 100 Employees

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
President/CEO/GM	4	3	*	*	179,008				*	*
V.P. Operations & Engineering/COO	4	4	126,610	162,442	138,598	129,590	148,437	139,429	*	*
Director/V.P. Operations	4	3	100,291	115,233	112,560	*	*	*	*	*
Director/V.P. Engineering	*	*	*	*	*	*	*	*	*	*
Engineering Manager	*	*	*	*	*	*	*	*	*	*
Distribution Engineer	*	*	*	*	*	*	*	*	*	*
Engineering Supervisor	4	6	75,002	101,224	86,467	86,272	87,869	87,674	*	*
Operations Manager or Superintendent	4	3	79,911	109,556	97,084	*	*	*	*	*
Control Centre Supervisor	*	*	*	*	*	*	*	*	*	*
Meter Shop Supervisor	4	3	79,112	108,295	96,170	*	*	*	*	*
Line Supervisor	4	8	73,158	98,160	85,829	84,106	87,015	85,292	*	*
Purchasing/Procurement Manager	4	3	75,851	103,413	92,721	*	*	*	*	*
Stores/Inventory Control Supervisor	*	*	*	*	*	*	*	*	*	*
Executive Assistant (to President)	4	5	52,577	66,637	63,363	61,866	64,121	62,624	*	*
Administrative Assistant	*	*	*	*	*	*	*	*	*	*
Director/VP Finance/CFO	4	3	115,831	170,723	152,587	*	*	*	*	*
Controller/Manager Finance	*	*	*	*	*	*	*	*	*	*
General Accounting Manager	*	*	*	*	*	*	*	*	*	*
Accounting Supervisor	*	*	*	*	*	*	*	*	*	*
Billing Supervisor	*	*	*	*	*	*	*	*	*	*
Director or VP, Customer Service	*	*	*	*	*	*	*	*	*	*
Manager, Customer Service	4	3	78,407	106,864	91,372	*	*	*	*	*
Customer Service Supervisor	*	*	*	*	*	*	*	*	*	*
Financial/Business Analyst	4	4	67,244	88,827	77,691	*	*	*	*	*
Director or VP, Regulatory Affairs	*	*	*	*	*	*	*	*	*	*
Manager, Regulatory Affairs	4	4	75,139	106,864	91,919	80,740	102,012	90,833	*	*

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
Settlement/Rate Analyst	*	*	*	*	*	*	*	*	*	*
Conservation & DM Officer	*	*	*	*	*	*	*	*	*	*
I.S. Director/VP	*	*	*	*	*	*	*	*	*	*
I.S. Manager	*	*	*	*	*	*	*	*	*	*
I.S. Supervisor/Computer Operations	*	*	*	*	*	*	*	*	*	*
Systems Administrator/Apps Support	*	*	*	*	*	*	*	*	*	*
Human Resources Director/VP	*	*	*	*	*	*	*	*	*	*
Human Resources Manager	*	*	*	*	*	*	*	*	*	*
Human Resources Generalist/Officer	*	*	*	*	*	*	*	*	*	*
Human Resources Assistant/Coord.	*	*	*	*	*	*	*	*	*	*
Manager Health & Safety/Loss Control	4	3	73,685	93,542	81,613	*	*	*	*	*

Compensation Analysis: By Employee Size

Table 24: LDCs 101 to 150 Employees

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
President/CEO/GM	5	5	149,698	176,821	176,821	161,790	179,495	174,900	*	*
V.P. Operations & Engineering/COO	*	*	*	*	*	*	*	*	*	*
Director/V.P. Operations	5	3	110,492	132,096	132,096	*	*	*	*	*
Director/V.P. Engineering	*	*	*	*	*	*	*	*	*	*
Engineering Manager	5	4	89,166	106,314	107,064	105,208	109,361	107,505	*	*
Distribution Engineer	*	*	*	*	*	*	*	*	*	*
Engineering Supervisor	*	*	*	*	*	*	*	*	*	*
Operations Manager or Superintendent	5	6	87,211	103,598	102,998	100,070	110,178	100,531	*	*
Control Centre Supervisor	5	4	78,784	95,687	94,569	88,749	99,504	93,684	*	*
Meter Shop Supervisor	5	4	75,526	88,661	86,776	84,011	90,965	88,200	*	*
Line Supervisor	5	17	76,312	91,470	91,291	89,460	90,721	89,804	*	*
Purchasing/Procurement Manager	5	4	68,947	80,835	79,397	78,296	82,166	81,065	*	*
Stores/Inventory Control Supervisor	*	*	*	*	*	*	*	*	*	*
Executive Assistant (to President)	5	5	56,375	67,689	69,782	64,963	73,610	66,387	*	*
Administrative Assistant	5	8	47,051	59,781	58,038	55,439	60,425	57,827	*	*
Director/VP Finance/CFO	5	5	112,587	135,602	135,602	132,824	139,254	133,935	*	*
Controller/Manager Finance	5	3	81,769	96,617	94,660	*	*	*	*	*
General Accounting Manager	*	*	*	*	*	*	*	*	*	*
Accounting Supervisor	*	*	*	*	*	*	*	*	*	*
Billing Supervisor	5	4	68,906	81,573	80,622	*	*	*	*	*
Director or VP, Customer Service	5	3	*	122,979	121,531	*	*	*	*	*
Manager, Customer Service	*	*	*	*	*	*	*	*	*	*
Customer Service Supervisor	5	5	61,205	75,940	76,896	*	*	*	*	*
Financial/Business Analyst	5	3	67,318	80,392	79,084	*	*	*	*	*
Director or VP, Regulatory Affairs	*	*	*	*	*	*	*	*	*	*
Manager, Regulatory Affairs	*	*	*	*	*	*	*	*	*	*

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
Settlement/Rate Analyst	5	3	66,758	79,219	77,717	*	*	*	*	*
Conservation & DM Officer	5	5	68,413	82,209	82,209	73,930	86,440	84,348	*	*
I.S. Director/VP	*	*	*	*	*	*	*	*	*	*
I.S. Manager	*	*	*	*	*	*	*	*	*	*
I.S. Supervisor/Computer Operations	*	*	*	*	*	*	*	*	*	*
Systems Administrator/Apps Support	5	5	66,016	78,658	86,325	79,561	93,615	86,851	*	*
Human Resources Director/VP	*	*	*	*	*	*	*	*	*	*
Human Resources Manager	*	*	*	*	*	*	*	*	*	*
Human Resources Generalist/Officer	*	*	*	*	*	*	*	*	*	*
Human Resources Assistant/Coord.	*	*	*	*	*	*	*	*	*	*
Manager Health & Safety/Loss Control	5	5	70,792	85,207	85,930	82,400	93,490	90,002	*	*

Compensation Analysis: By Employee Size

Table 25: LDCs 151 to 300 Employees

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
President/CEO/GM	5	4	*	*	190,424	179,116	194,238	182,930	*	*
V.P. Operations & Engineering/COO	5	4	126,295	164,376	157,025	141,896	176,024	160,895	17	20
Director/V.P. Operations	*	*	*	*	*	*	*	*	*	*
Director/V.P. Engineering	*	*	*	*	*	*	*	*	*	*
Engineering Manager	5	6	92,275	114,128	107,826	105,786	116,280	112,840	8	10
Distribution Engineer	*	*	*	*	*	*	*	*	*	*
Engineering Supervisor	*	*	*	*	*	*	*	*	*	*
Operations Manager or Superintendent	5	5	83,147	105,127	100,230	*	*	*	8	8
Control Centre Supervisor	5	3	81,250	92,762	86,837	*	*	*	*	*
Meter Shop Supervisor	5	5	75,721	89,498	88,652	86,332	90,610	86,840	8	8
Line Supervisor	5	20	75,896	91,344	88,545	85,670	90,610	89,893	10	10
Purchasing/Procurement Manager	5	4	83,581	102,211	97,160	92,207	101,534	96,582	12	12*
Stores/Inventory Control Supervisor	5	4	63,990	77,178	77,178	71,030	82,419	76,271	7	7
Executive Assistant (to President)	5	5	62,068	75,227	74,840	72,400	80,995	73,406	8	8
Administrative Assistant	5	8	54,558	66,025	62,584	59,720	61,025	60,825	6	6
Director/VP Finance/CFO	5	5	125,021	154,890	147,815	130,816	175,275	139,802	20	20
Controller/Manager Finance	5	4	93,763	117,949	112,396	101,164	120,946	109,714	11	11
General Accounting Manager	5	3	83,705	101,583	91,126	*	*	*	*	*
Accounting Supervisor	5	5	67,936	81,494	79,673	*	*	*	7	7
Billing Supervisor	*	*	*	*	*	*	*	*	*	*
Director or VP, Customer Service	5	5	95,130	128,902	124,474	112,800	130,816	114,915	12	15
Manager, Customer Service	5	4	79,779	98,609	92,441	88,660	93,866	90,086	10	10
Customer Service Supervisor	5	6	66,964	81,542	80,518	79,552	80,470	79,991	8	8
Financial/Business Analyst	5	5	62,121	77,974	73,830	68,616	81,891	76,677	*	*
Director or VP, Regulatory Affairs	*	*	*	*	*	*	*	*	*	*
Manager, Regulatory Affairs	*	*	*	*	*	*	*	*	*	*

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
Settlement/Rate Analyst	5	5	65,861	79,581	78,520	72,437	82,317	76,234	6	6
Conservation & DM Officer	5	3	76,733	96,625	91,893	*	*	*	*	*
I.S. Director/VP	5	4	103,431	126,869	122,283	115,812	131,110	124,638	17	17
I.S. Manager	5	4	79,673	101,138	96,144	*	*	*	8	8
I.S. Supervisor/Computer Operations	*	*	*	*	*	*	*	*	*	*
Systems Administrator/Apps Support	5	7	60,420	77,624	77,624	77,273	80,148	79,797	*	*
Human Resources Director/VP	5	3	98,960	84,412	113,638	*	*	*	17	17
Human Resources Manager	*	*	*	*	*	*	*	*	*	*
Human Resources Generalist/Officer	5	4	67,693	80,236	75,822	*	*	*	*	*
Human Resources Assistant/Coord.	5	3	53,392	62,645	59,666	*	*	*	*	*
Manager Health & Safety/Loss Control	5	4	80,871	97,285	97,285	90,898	103,588	97,202	10	8

Compensation Analysis: By Employee Size

Table 26: LDCs 301+ Employees

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
President/CEO/GM	4	3	*	*	239,564	*	*	*	22	25
V.P. Operations & Engineering/COO	4	3	*	*	192,733	*	*	*	25	33
Director/V.P. Operations	4	4	114,628	155,488	148,974	135,726	155,949	142,701	12	17
Director/V.P. Engineering	4	3	112,266	152,139	141,461	*	*	*	*	*
Engineering Manager	4	5	89,836	119,006	112,926	107,973	116,633	111,681	7	10
Distribution Engineer	4	12	80,778	107,320	98,228	91,895	104,601	98,268	*	*
Engineering Supervisor	4	9	75,468	101,673	90,319	85,754	96,812	94,173	*	*
Operations Manager or Superintendent	4	9	87,694	116,334	109,298	105,251	113,816	109,770	7	10
Control Centre Supervisor	4	4	76,882	102,401	99,095	*	*	*	*	*
Meter Shop Supervisor	4	6	77,458	102,458	96,959	93,265	101,777	98,083	*	*
Line Supervisor	4	23	78,904	104,267	98,421	96,917	100,072	98,568	*	*
Purchasing/Procurement Manager	4	4	78,427	104,503	97,258	83,538	112,037	98,317	*	*
Stores/Inventory Control Supervisor	4	4	66,598	88,509	87,707	*	*	*	*	*
Executive Assistant (to President)	4	4	55,153	72,852	67,963	64,316	71,793	68,146	*	*
Administrative Assistant	4	15	52,508	70,030	63,653	*	*	*	*	*
Director/VP Finance/CFO	4	4	126,769	180,678	178,230	154,497	209,317	185,585	21	28
Controller/Manager Finance	4	4	91,672	125,130	115,849	91,285	128,022	103,458	8	12
General Accounting Manager	4	3	78,589	106,504	98,759	*	*	*	*	*
Accounting Supervisor	4	8	66,865	88,835	84,848	*	*	*	*	*
Billing Supervisor	4	6	68,315	90,115	86,177	81,635	91,507	86,964	*	*
Director or VP, Customer Service	4	3	103,793	143,644	134,577	*	*	*	*	*
Manager, Customer Service	*	*	*	*	*	*	*	*	*	*
Customer Service Supervisor	4	6	66,598	88,509	82,325	*	*	*	*	*
Financial/Business Analyst	4	10	67,069	89,626	81,660	*	*	*	*	*
Director or VP, Regulatory Affairs	4	3	108,585	150,233	138,604	*	*	*	*	*
Manager, Regulatory Affairs	4	4	78,301	103,968	97,451	89,476	106,844	100,287	7	10

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
Settlement/Rate Analyst	*	*	*	*	*	*	*	*	*	*
Conservation & DM Officer	4	4	76,127	101,243	93,020	82,716	103,565	93,262	*	*
I.S. Director/VP	4	3	113,633	163,014	153,461	*	*	*	*	*
I.S. Manager	4	4	88,401	117,996	107,794	99,457	119,185	110,848	10	15
I.S. Supervisor/Computer Operations	4	4	75,637	100,855	89,954	*	*	*	*	*
Systems Administrator/Apps Support	4	12	68,278	89,995	85,214	82,780	90,430	87,997	*	*
Human Resources Director/VP	4	3	105,160	151,821	141,996	*	*	*	*	*
Human Resources Manager	4	4	83,513	122,072	108,093	*	*	*	*	*
Human Resources Generalist/Officer	4	8	62,935	95,412	85,163	*	*	*	*	*
Human Resources Assistant/Coord.	4	8	52,745	70,634	62,483	58,620	67,835	63,971	*	*
Manager Health & Safety/Loss Control	4	6	82,902	111,204	99,872	90,973	103,444	94,545	10	15

Perquisites – All LDCs

Table 27: Perquisites by Position Level

Perquisite:	CEO/President	Executive	Middle Management	Not Applicable
Company car for business or personal use	17	12	11	22
Association or professional membership dues	39	42	37	4
Supplemental Group Life Insurance	28	27	26	14
Executive training programs or coaching	39	36	25	4
Personal computer for home use	20	16	13	21
Cellular phone for business or personal use	46	45	40	0
Employee Assistance Programs (EAPs)	41	41	40	5
Educational reimbursement	43	44	42	2
Extended vacation allowance	9	8	6	29
Outplacement counselling	11	11	11	30
Flex time	16	17	14	24
Fitness or recreational club memberships or access	17	17	15	25
Financial or legal counselling	8	7	8	32

No. of companies reporting = 47

- *Actual prevalence response - multiple responses accepted*

Table 28: Other Perquisites Noted

Other Perquisites
Three annual vacation floaters
1 week in lieu of overtime
Energy Efficient Interest Free Loans up to $5000 / Computer Interest free loans up to $4000 / Health Club Memberships up to $400 / Wellness Fund reimbursements up to $300 / Tuition Subsidies and Volunteer Subsidies
STD paid @ 100%, Group RSP,
6 weeks after 26 years
Health Services Spending Account - $1,100
Every third Friday off, 2 floater days per calendar year
Computer Acquistion Program
1 additional floater holiday upon start date; 1 additiional floater holiday after 25 years of service

Table 29: Mileage & Auto

CEO Average Monthly car allowance (26 respondents)	$610.00
Executive Average Monthly car allowance (18 respondents)	$515.00
Average Mileage Reimbursement (47 respondents)	0.486

Table 30: Service Periods for Vacation Entitlement

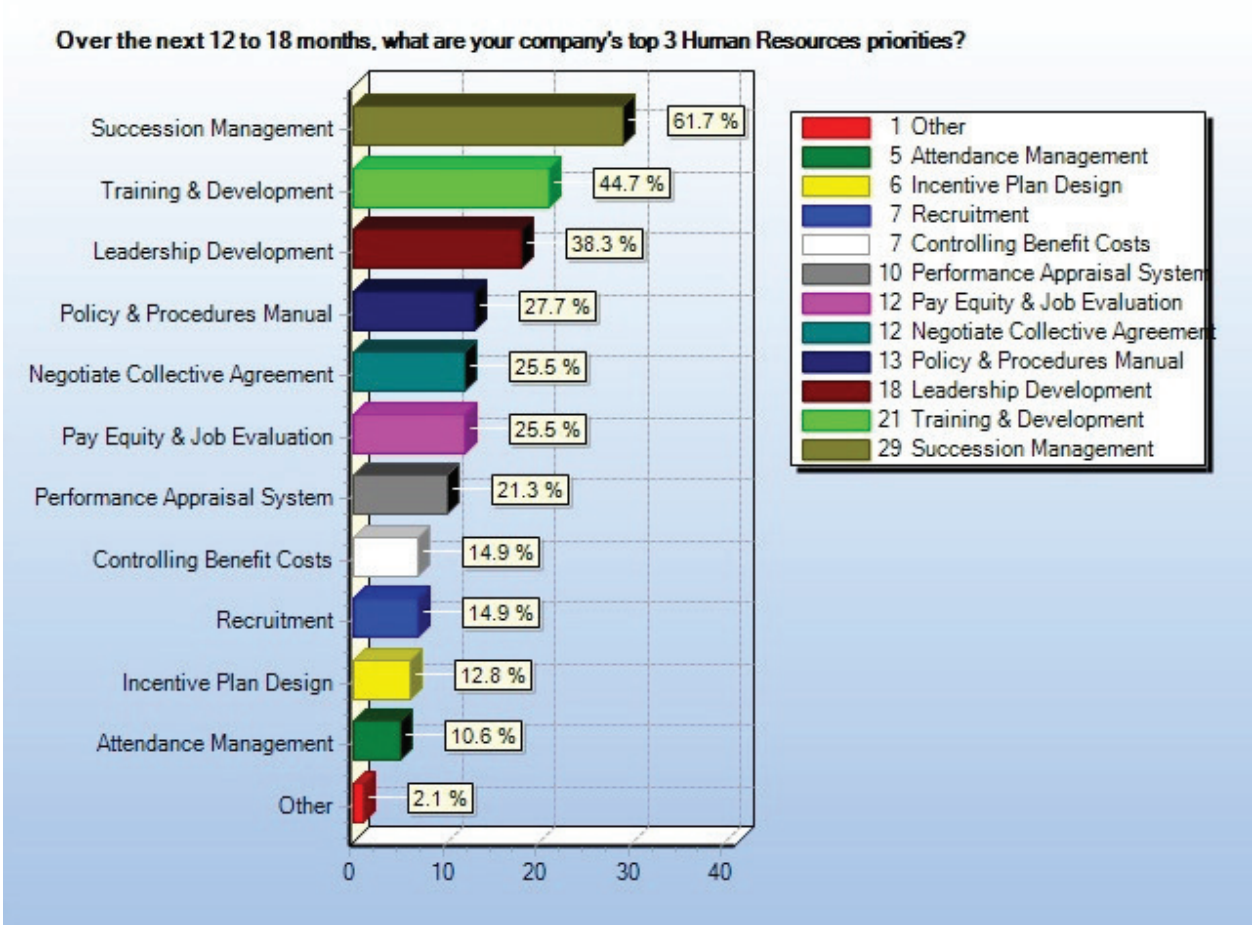
Years of Service:	Eligible for 2 weeks	Eligible for 3 weeks	Eligible for 4 weeks	Eligible for 5 weeks	Eligible for 6 or more weeks
CEO/Pres - 3 years service	5	18	12	8	1
CEO/Pres - 5 years service		21	11	8	3
CEO/Pres - 10 years service		1	4	11	7
CEO/Pres - 15 years service			16	17	9
CEO/Pres - 20 years service				26	15
CEO/Pres - 25 years service				8	33
Executive- 3 years service	6	24	11	2	
Executive- 5 years service		27	12	3	1
Executive- 10 years service		1	31	7	5
Executive- 15 years service			20	17	5
Executive- 20 years service				30	11
Executive- 25 years service				9	33
Middle Management- 3 years service	6	32	5	1	
Middle Management- 5 years service		33	9	2	
Middle Management- 10 years service		1	35	5	2
Middle Management- 15 years service			21	19	3
Middle Management- 20 years service			1	32	8
Middle Management- 25 years service				9	34
Professionals - 3 years service	8	27	4		
Professional - 5 years service		31	8		
Professional - 10 years service		1	34	4	
Professional - 15 years service			20	17	1
Professional - 20 years service				31	7
Professional - 25 years service				9	29
Admin - 3 years service	8	28	3		
Admin - 5 years service		34	6		
Admin - 10 years service		1	36	3	
Admin - 15 years service			22	16	1
Admin - 20 years service			32	32	6
Admin - 25 years service				10	28

Base Compensation Planning

2011 Actual Average Base Pay Increase: Out of 44 respondents, the actual average base pay increase for 2011 was 3.27%. Increases ranged from a low of 1.88% to a high of 8%.	
Percentile	**% Increase**
N	44
25th Percentile	2.73
50th Percentile	3.00
75th Percentile	3.00
Average	3.27
2011 Compensation Structure Adjustment: If your company uses a formal salary range (compensation) structure, by what percentage did you increase the structure in 2011? (E.g. 1%; 2% etc.). 30 Respondents indicated that the structure was adjusted by 2.54% on average. The range was from 0 to 3.25%.	
Percentile	**% Increase**
N	30
25th Percentile	2.13
50th Percentile	3.00
75th Percentile	3.00
Average	2.54
2012 Projected Average Salary Increase: The average response indicates that the projected 2012 average base pay increase will be 2.97%. Increases range from a low of 1.5% to a high of 5.3%.	
Percentile	**% Increase**
N	31
25th Percentile	2.75
50th Percentile	3.00
75th Percentile	3.00
Average	2.97
2012 Projected Compensation Structure Adjustment: By what percentage does your organization plan to increase the salary range/compensation structure in 2012? The average increase in the salary structure will increase by 2.64%. The range was from 0 to 3%.	
Percentile	**% Increase**
N	22
25th Percentile	2.55
50th Percentile	3.00
75th Percentile	3.00
Average	2.64

Top HR Priorities – 2012

The top 3 priorities indicated for 2012 are:
1) Succession Management;
2) Training & Development and
3) Leadership Development.



Appendix:

MEARIE Management Salary Survey – Position Profiles 2011/2012

The following is the 2011-2012 listing of benchmark positions for the survey. Please use them to guide you in identifying job matches.

Please note:

- Match your jobs to the survey jobs based on content, rather than job title
- Recognize that your incumbent need not perform all of the functions described in the survey job profile in order to have a valid job match. If 80% of job responsibilities are the same, then you likely have a good match. If not, another job match may be more appropriate or there may not be a good match in this survey.

The survey has not been designed to cover every possible job in your organization - the selected jobs are intended to be benchmarks, so please treat them accordingly. Generally, if you match between 40 to 50 percent of your key jobs to external data, you will be able to compare your salary st MEARIE Management & Board of Directors Compensation Survey –

President, General Manager or CEO

Directs the development of short and long term strategic plans, operational objectives, policies, budgets and operating plans for the organization, as approved by the Board of Directors. Establishes an organization hierarchy and delegates limits of authority to subordinate executives regarding policies, contractual commitments, expenditures and human resource matters. Represents the organization to the financial community, industry groups, government and regulatory agencies and the general public.This position may be titled 'General Manager' in smaller utilities.

Vice President Operations & Engineering or Chief Operating Officer

Highest ranking operations position. Reporting to the President/CEO, directs both the operations and engineering functions. Formulates and implements plans, budgets, policies and procedures to facilitate and improve processes. Establishes clear controls, objectives and measures to ensure safe and appropriate delivery of power and power related services. Evaluates the feasibility of new or revised systems or procedures and oversees operations and engineering to ensure compliance with established standards.

Director or Vice President Operations

Reporting to the President/CEO,2 plans and directs all operations functions (no engineering responsibility), of the utility. Formulates and implements plans, policies and procedures to facilitate and improve processes and establishes clear controls, objectives and measures to ensure safe and appropriate delivery of services and clarity of roles and responsibilities. Evaluates the feasibility of new or revised systems or procedures and oversees operations to ensure compliance with established standards.

Director or Vice President Engineering

Highest ranking engineering position. Plans and directs the overall engineering activities and engineering staff of the organization. Coordinates the creation, development, design and improvement of the organization's projects and products in conformance with established programs and objectives. Oversees plans, resources and budgets of the department aligned with business strategy.

Engineering Manager

Supervises and directs the work of an engineering division such as distribution, line design, transmission planning, distribution planning and/or civil engineering. Responsible for engineering work involving a wide scope of assignments. Handles personnel coordination and issues of the division, prepares estimates, specifications and designs, including the supervision, planning and scheduling of work within the division – Requires a P.Eng.

Distribution Engineer

Supervises engineering technicians or service technicians. Directs and coordinates the activities, schedules and projects of the construction and maintenance group of those involved with the distribution of electrical power from transformer substations, construction and maintenance of distribution systems. Consults with other department management on plant design, construction and maintenance. Prepares monthly operating reports, budget estimates, and work and materials specifications. Reviews and approves material requisitions, work authorizations and drawings for facilities. Requires a P.Eng. Typically reports to the Engineering Manager.

Engineering Supervisor

Supervises a small technical work group which may include CAD operators and/or engineering technicians. Coordinates the development and maintenance of engineering and construction standards and systems (GIS, AM/FM, CAD). Organizes, stores and maintains the integrity of hard copy file records, digital formats and mapping standards. Normally requires a C.E.T. or A.Sc. T. Typically reports to a professional engineer.

Operations Manager or Superintendent

Supervises, co-ordinates, directs, schedules and controls the construction, maintenance and personnel of the division, including budgets, transportation, equipment and material requirements and fleet management. Division responsibilities include construction, maintenance and repair of all overhead transmission, overhead and underground distribution and may include coordination of tree trimming for geographical area assigned to the division. In smaller utilities, a professional engineer may fill this role. In larger utilities, this function may be split into separate sections, each with a non-professional superintendent reporting to a Professional Engineer. Typically reports to VP Engineering and/or VP Operations.

Control Centre Supervisor

Directs and supervises control centre technical staff. Provides planning and coordination of control centre scheduling and maintenance required for the safe, reliable operation and control of the distribution system, including the authorization of the operation of system devices, equipment and control access to electrical plant and substations. Approves and coordinates system outages and switching as required for maintenance and system reliability. Oversees power interruptions and emergencies with dispatch staff to affect corrective measures for isolation, emergency repairs and restoration purposes. Monitors feeder load profiles.

Meter Shop Supervisor

Responsible for overall operation of the Meter department, including operations, budgeting and direction and supervision of meter technicians or other operations staff. Assigns, monitors and inspects the daily work and productivity of the staff in metering operations to ensure timely delivery of services, maintenance of equipment and identification of issues. Develops work plans for the department that include supervising meter re-verification, new meter installs, record maintenance and monitoring of meter maintenance, damage, reporting and theft issues. Ensures compliance with technical standards for equipment. Responsible for electronic meter programming and interaction with/operation of an MV90 or similar data collection system.

Line Supervisor

Coordinates and directs the Field Supervisor/s or lead journey person in the construction and maintenance of transmission and distribution lines and equipment. Works with Field Supervisors or lead journey person to develop plans and schedules required in directing and assigning a crew or crews of skilled trade staff in performing construction, maintenance and operation of the power transmission and distribution system lines in a safe and efficient manner. Supervises and coordinates subcontractors engaged in planning and executing work procedures, interpreting specifications and managing construction.

Purchasing or Procurement Manager

Responsible for all purchasing for all areas of the utility. Negotiates vendor agreements and manages the tender process. May also be responsible for stores and inventory control in the warehouse. Supervises and directs the work of the purchasing or buyers and stores personnel.

Stores or Inventory Control Supervisor

Supervises inventory control, records and stores operation. Orders material to maintain on-hand quantities with purchasing manager/buyer approval. Responsible for testing safety equipment, i.e., hoses, blankets, gloves, etc., small tool and equipment repair and reconditioning. Assists purchasing department in the sale of obsolete equipment and material.

Executive Assistant to President

Performs advanced, diversified and confidential administrative duties requiring broad knowledge of organizational policies and practices. Initiates and prepares correspondence, reports, either routine or non-routine. Screens telephone calls and visitors and resolves routine and complex inquiries. Schedules appointments, meetings and travel itineraries. In some cases, may have responsibility for routine HR and administrative services. Records, prepares and distributes minutes of meetings, including Board of Director minutes. Reports to the President/CEO/General Manager and may provide support to other executives.

Administrative Assistant

Performs advanced, diversified and confidential administrative duties for executives and/ or senior management, requiring broad and comprehensive experience and knowledge of organizational policies and practices. Prepares correspondence, reports, either routine or non-routine. Screens telephone calls and visitors and resolves routine and complex inquiries. Schedules appointments, meetings and travel itineraries. This is a non-union position and reports to a senior executive or executive team.

Director or VP Finance or CFO

Highest ranking financially-oriented position within the company. Reporting to the President/CEO, this strategic role plans directs and controls the organization's overall financial plans, policies and accounting practices and relationships with lending institutions, shareholders and the financial community in mid to large organizations. Provides advice and guidance for the Board of Directors on financial matters. May direct such functions as finance, general accounting, tax, payroll, customer billing, regulatory affairs, and information systems and may be responsible for Administration functions. Normally possesses a CA, CMA or CGA designation.

Controller or Manager, Finance

Responsible for all financial reporting and record keeping functions. Directs the establishment and maintenance of the organization's accounting and finance principles, practices and procedures for the maintenance of its fiscal records and the preparation of its financial reports. Directs general and property accounting, cost accounting and budgetary control. Appraises operating results in terms of costs, budgets, operating policies, trends and increased profit opportunities. May be the most senior financial position in a small to mid-size corporation or reporting to a Director/VP Finance in a mid to large corporation.

General Accounting Manager

Manages the general accounting functions and the preparation of reports and statistics reflecting earnings, profits, cash balances and other financial results. Formulates and administers approved accounting practices throughout the organization to ensure that financial and operating reports accurately reflect the condition of the business and provide reliable information. Generally reports to the Controller or CFO.

Accounting (A/R, A/P) Supervisor

Coordinates activities of the payable/receivable clerks. Supervises accounts payable and receivable transactions, entries and trial balances; responsible for the accuracy of all journal entries and reconciliation of invoices; updates credit department on account status.

Director or VP Customer Service

The highest ranking customer service position in the utility. Provides direction for all departmental activities, services and practices, including customer care/call centre, billing, credit and collections. Accountable for the development, implementation and integration of all customer service related activities to achieve a competitive advantage through customer driven initiatives and strategies. Directs and oversees the implementation of customer service standards, policies and procedures; manages and coordinates budgets; manages activities of CS managers and/or supervisory staff for mid to large size organizations.

Manager Customer Service

Manages a team of customer service representatives in providing information, receiving and responding to customer inquiries, complaint or requests. Develops and maintains customer information systems, processes and procedures including billing, credit, deposits and collections. Liaises with representatives of other organizations and customer groups to share information and resolve administrative, organizational and technical problems. Responds to elevated customer complaints. This function may also be responsible for coordinating meter installation/maintenance, residential electric service connections, and service calls in a medium size organization.

Customer Service Supervisor

Supervises customer service representatives and coordinates customer service programs within the framework of established customer service policies. Schedules and organizes staff to accommodate anticipated work-flow from bill inquiries, delinquent accounts, re-connections and disconnections, customer deposits, etc. Recommends corrective steps to address customer issues and refers unique issues to manager for response.

Billing Supervisor
This position is responsible for overseeing and management of staff, processes and systems to collect and validate meter reading data, calculate and issue customer invoices and conduct settlement activities in the wholesale and retail markets. The incumbent also monitors compliance with regulation(s) and company policies for billing processes.

Financial or Business Analyst

Conducts analysis of information for budgeting, investment and financial forecasts; applies principles of accounting to analyze past and present financial operations; estimates future revenues and expenditures; prepares budgets; develops and maintains budgeting systems; Process and prepares business transactions and reports, reconciles ledgers and sub-ledgers, cash flow projections, entry of source documents.

Director or V.P., Regulatory Affairs

Represents the organization on quality and regulatory matters before government agencies and conformity assessment bodies including providing of evidence, regulatory filings, supporting analyses, position papers, interrogatory responses, etc. Keeps abreast of on-going developments in regulatory practices affecting electrical distribution utilities. Ensures that regulatory information is disseminated throughout the organization in a timely and effective manner. Is responsible for the filing of written communications and regulatory submissions to government agencies (OEB) and conformity assessment bodies (IMO). Generally reports to President or Sr. Executive in large organization.

Manager, Regulatory Affairs

Manages the organization's regulatory programs and activities to ensure compliance. Assists the President on quality and regulatory matters before government agencies, providing research and analyses. Ensures that regulatory information is disseminated throughout the organization in a timely and effective manner. Co-ordinates the filing of written communications and regulatory submissions to government agencies (OEB) and conformity assessment bodies (IMO). Generally reports to the President in a small to mid-size organization.

Settlement or Rate Analyst

Responsible for recording, creating, analyzing, processing and reconciling metering data. Operates and administers an MV-90 or similar data collection system, downloading, validating, editing, estimating and processing interval meter-related information. Has in-depth understanding of commercial billing practices, the IMO and the OEB's Retail Settlement Code. Analyses rates using rate sensitivity models and develops appropriate rate structures, using the specific models. Participates in the development of policies.

Conservation and Demand Management Officer

This position is responsible for planning, coordinating, evaluating and delivering energy and water conservation and demand management programs. Develops plans for programs in accordance with the OEB's conservation and demand management code to ensure achievement of OEB mandated energy consumption and demand conservation targets.

Information Systems Director or V.P.

Accountable for operations and alignment of the Information and Telecommunication Systems with the business in terms of mission, vision and the strategic imperatives. Ensures that existing needs and future demands of internal and external customers are met through a cost effective and efficient information and telecommunication infrastructure. Oversees IS management in areas of computer operations, systems planning, design, programming and telecommunications. Reviews and evaluates project feasibility and needs based upon management's and business requirements and priorities. Develops departmental plans, strategy, budgets and resource requirements. Typically reports to President or CFO in a mid to large size organization.

Information Systems Manager

Manages and directs staff in areas of computer operations, systems planning, design, programming and telecommunications. Develops and maintains systems standards and procedures and assigns work to department staff. Reviews and evaluates project feasibility and needs based upon management's and business requirements and priorities. Develops departmental plans, project plans, budgets and resource requirements. Typically reports to Director of Finance in a small to mid-sized organization.

Information Systems Supervisor or Computer Operations Supervisor

Supervises employees who monitor and control computer equipment and data processing. Schedules all production runs including processing of bills, updating inventory system, meter record and all other data processing applications. Maintains hardware and troubleshoots when necessary. May report to a Director/VP, Information Systems.

Systems Administrator or Applications/Systems Support Professional

Responsible for maintenance of software systems including system analysis, programming and design, updates and changes. Makes preliminary study of new applications and recommendations to implement them, including hardware and software. Troubleshoots and corrects problems in existing programs, other than normal problems, usually caused by changes of software or hardware. Typically reports to the Manager, IS in a large utility or Director or V.P. Information Systems or V.P Finance in a smaller utility.

Human Resources Director or VP

Provides support and alignment of organization-wide Human Resources practices and systems with the business in terms of mission, vision and the strategic imperatives. Ensures that existing needs and future demands of internal customers are met through a cost effective and efficient HR services. Directs HR management and staff in the development and implementation of Human Resources strategy, policies and programs covering employment, negotiations & labour relations, training, compensation, organization development, performance management, benefits and may include health & safety. Provides coaching and counsel to the executive and Board of Directors. Generally reports to the President of a mid to large size organization.

Human Resources Manager

Develops and implements human resources programs, including compensation, benefits, recruitment, performance management, labour relations/negotiations, training and development, assists in policy development, HR planning, record keeping or payroll etc. May supervise a team of HR professionals or support staff. May be the most senior HR professional in a small to mid-size organization or report to the top HR professional in a large organization.

Human Resources Generalist or Officer

Assists in the development and implementation of human resources policies and programs by providing support and guidance to managers and employees in the areas of compensation, labour relations, employee relations, performance management, benefits, recruitment, training and HRIS systems. May assist in the preparation of negotiations. Reports to HR Manager or Senior Executive.

Human Resources Coordinator

Not an administrative assistant role, but rather with the focus on administrative support to one or more functional areas of HR. Processes, coordinates and enters into a HRIS or other system, a variety of documents including employment applications, benefits, compensation and payroll changes and confidential employee information. Responds to routine employment questions and distributes and maintains manuals and employee program communications. Reports to HR Manager/Director/V.P.

Manager, Health & Safety or Loss Control

Accountable for the development and implementation of occupational health, safety and environmental programs, including training, maintenance of safe working conditions, investigation and reporting of workplace accidents. Also identifies areas of potential risk and makes recommendations to reduce or eliminate potential accident or health hazards in compliance with government regulations.

The MEARIE Group
3700 Steeles Ave West
Suite 1100
Vaughan, Ontario
L4L 8K8

1 - SEC - 3

Reference:

Exhibit 1

Question:

Please provide a step-by-step explanation of the Applicant's budgeting process.

Response:

The description of the budgeting process has been provided in section 4.1.3 of Exhibit 4 beginning on page 11.

1 - SEC - 4

Reference:

Exhibit 1

Question:

Please provide details of all productivity and efficiency measures the Applicant has taken since its last rebasing application in 2009.

Response:

Please refer to the response to SEC – 34.

1 - SEC - 5

Reference:

Exhibit 1

Question:

Please provide details of all productivity and efficiency measures the Applicant plans to take in the test year. Please quantify the forecast savings.

Response:

Productivity is embedded throughout the operations at ENWIN. ENWIN's planning and budgeting process assumes productivity will be achieved by using the IRM rate increases as a guide to establish the overall operating and capital activities of the organization.

Exhibit 2, Attachment 2-A Distribution System Plan, Section 5.2.1 (c), Sources of Cost Savings Expected, identifies and discusses specific projects and activities related to productivity measures, which ENWIN has undertaken or is planning to implement to achieve cost saving and improve efficiencies.

1 - SEC - 6

Reference:

Exhibit 1

Question:

Please provide a copy of the Applicant's 2009 to 2019 corporate scorecards.

Response:

ENWIN has recently started using a corporate scorecard approach to track key measurables and drive continuous improvement. Beginning in fiscal 2016, ENWIN tracked and reported to its Board of Directors on 14 key performance indicators. The 2018 Corporate Scorecard is attached as Attachment 1, which includes results from 2016 and 2017. In Attachment 2, ENWIN included its 2019 Corporate Scorecard with YTD results as of May 2019.

SEC 6 - Attachment 1: Corporate Scorecard 2016, 2017 and 2018.

SEC 6 - Attachment 2: Corporate Scorecard YTD 2019.

Corporate Metrics
2018 Final Results

Strategic Framework	Performance Metric	2016 Actual	2017 Actual	2018 Target	2018 Actual	Achieved
Customer Focus	First Call Resolution Improvement over four year average 2015-98.17%, 2016-97.93%, 2017-98.04%, 2018 - 98.63%[1]	97.93%	98.04%	98.02%	98.63%	Yes
	Water Customer Satisfaction ratings maintained, Complaints per 1,000 Customers [2]	2.07	2.87	2.47	4.22	**No**
People & Culture	Health and Safety lost days (corporate wide-hydro and water) not in excess of prior 5 year rolling average	8	5	=<35	3	Yes
Quality & Innovation	Percentage of outages affecting more than 1000 customers for more than 5 minutes	3.6%	1.4%	<5.0%	2.6%	Yes
	Calls answered on time % [3]	70.7%	78.2%	70%	76.9%	Yes
Organizational Sustainability	Financial Statement targets achieved or exceeded annually					
	EWU Net Income- MIFRS '000	$7,999	$7,240	$9,938	$ 12,954	Yes **
	EWE Net Income - IFRS '000	$335	$294	$111	$ 245	Yes
	WUC Net Income - IFRS '000	$16,177	$14,735	$14,431	$ 16,410	Yes
	Capital Expenditures not > than budget or below 20% of total budget					
	EWU- Capital - Hydro $ '000's	$14,939	$14,061	$19,499	$ 16,533	Yes ***
	Actual % ofTotal				85%	
	WUC - Capital - Water '000	$23,096	$29,509	$28,507	$ 25,094	Yes
	Actual % ofTotal				88%	
	Current Ratio WCU	1.99	2.19	2.0	2.37	Yes
	Current Ratio WUC	0.98	1.42	1.3	1.94	Yes
	Inventory Level at end of year (EWU)	$ 5,195	$ 4,097	$ 3,900	$ 3,749	Yes
Community & Partnership	CDM 5 year approved plan target achieved[4]	New methodology in place for 2018		44,125 MWh	94,268 MWh	Yes

Notes

[1] OEB scorecard measure - 2018 target based on average of recent 4 year results 2014-2017.

[2] Water Customer Satisfaction is a measure of number of Water Quality complaints. Target is based on most recent 2 year average.

3 Calls answered on time is an OEB scorecard target. OEB target is 65%. ENWIN target is 70%

4 Target is based on most recently approved CDM plan (approved by the IESO). Eg. 2018 target based on most recent plan as of approval date of fall 2017; Target has been refined to represent signed contracts as of December 31, 2018 ie. "work in the pipeline" since IESO does not confirm outcome until July of year following. Targets established to 2020 only by IESO. Note: if 103% of plan achieved, ENWIN is eligible for IESO incentive payment, but targets are based on expectation of 151,303 MWh in 2020, which is considered a stretch goal.

Target not Met

Hydro and Water Corporate Metrics

Strategic Framework	Performance Metric	2016 Actual	2017 Actual	2018 Actual	2019 Target	JAN 2019 YTD	FEB 2019 YTD	MAR 2019 YTD	APR 2019 YTD	MAY 2019 YTD
Customer Focus	First Call Resolution Improvement over four year average 2015-98.17%, 2016-97.93%, 2017-98.04%, 2018 - 98.63%[1]	97.93%	98.04%	98.63%	98.19%	98.75%	98.46%	98.48%	98.58%	98.57%
	First Call Resolution - Monthly					98.75%	98.13%	98.50%	98.90%	98.51%
	Water Customer Satisfaction ratings maintained, Complaints per 1,000 Customers [2]	2.07	2.87	4.22	3.55	3.16	3.35	3.59	3.66	3.59
People & Culture	Health and Safety lost days (corporate wide-hydro and water) not in excess of prior 5 year rolling average) [7]	8	5	3	22	0	16	33	33	33
Quality & Innovation	Percentage of outages affecting more than 1000 customers for more than 5 minutes [3]	3.6%	1.4%	2.6%	3.0%	0.0%	2.4%	1.4%	2.0%	2.4%
	Calls answered on time % [4] YTD	70.7%	78.2%	76.9%	75.3%	87.3%	84.5%	86.5%	86.1%	85.5%
	Calls answered on time-target 70% or better - Monthly					87.3%	81.4%	90.3%	84.6%	83.7%
Organizational Sustainability	Financial Statement targets achieved or exceeded annually EWU Net Income- MIFRS '000	$7,999	$7,240	$ 12,954	$ 8,725	$ 534	$ 1,379	$1,707	$2,453	$3,346
	EWE Net Income - IFRS '000	$335	$294	$ 245	$ 214	$ (17)	$ 14	$ 35	$ 56	$ 86
	WUC Net Income - IFRS '000	$16,177	$14,735	$ 16,410	$ 15,165	$ 1,141	$ 1,668	$3,226	$4,735	$5,815
	Capital Expenditures not > than budget or below 20% of total budget EWU- Capital - Hydro $ '000's	$14,939	$14,061	$ 16,533	$ 21,386	$ 1,164	$ 1,018	$2,092	$3,427	$4,788
	Actual % ofTotal					5%	5%	10%	16%	22%
	WUC - Capital - Water '000	$23,096	$29,509	$ 25,094	$ 27,871	$ 663	$ 1,247	$2,430	$5,069	$7,285
	Actual % ofTotal					2%	4%	9%	18%	26%
	Current Ratio WCU	1.99	2.19	2.37	1.95	2.22	2.30	2.39	2.90	2.75
	Current Ratio [5] WUC	0.98	1.42	1.94	1.64	1.70	1.84	1.95	1.77	1.70
	Inventory Level at end of year (EWU)	$ 5,195	$ 4,097	$ 3,749	$ 3,700	$ 3,740	$ 3,900	$ 4,238	$ 4,952	$ 5,857
Community & Partnership	ONTech Net Income/(Loss) or better [6]				$ (72,503)	$ (5,550)	$ (5,550)	$ (5,550)	$ (5,550)	$ (5,550)

Notes

[1] OEB scorecard measure - 2019 target based on average of recent 4 years results

[2] Water Customer Satisfaction is a measure of number of Water Quality complaints. Target is based on recent 2 year average

[3] Percentage of outages historically at less than 5%. Proposed target for 2019 is 3% to appropriately incent noting that the median of the prior 3 years is 2.6%.

[4] Calls answered on time represents quality per OEB scorecard. OEB target is 65%. ENWIN target is amended/ increased to further challenge management and is based on most

[5] Current ratio amended from original budget proposal to now net the residual investment funds from reservoir project- a more challenging target to achieve.

[6] ONTech budgeted loss for year 1 and 2 - $98,500 less amount incurred in 2018 -$25,997 = target loss not greater than $72,503

[7] Lost days to exclude injury illness time related to prior years' workplace injuries

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Reference:

Exhibit 1

Question:

SEC understands that since its last rebasing application Windsor city council has ordered a number of audits to be conducted of the Applicant. Please provide a copy of those audits, as well as an update on the implementation of any findings contained within.

Response:

Please find attached copies of the audit reports referenced below. The reports contain either management response and/or management action plans.

SEC 7 - Attachment 1 - Copy of a report to the City of Windsor's Chief Administrative Officer titled "*Internal Audit of ENWIN Utilities Ltd. – Phase A*, dated April 10, 2013.

SEC 7 - Attachment 2 - Copy of a report to ENWIN Utilities Ltd.'s Chief Financial Officer titled "*Internal Audit of ENWIN Utilities Ltd. – Procurement Process*, dated May 6, 2014.

SEC 7 - Attachment 3 - Copy of a report to ENWIN Utilities Ltd.'s Board of Directors titled "*PWC Internal Audit Report*", dated July 26, 2016.

www.pwc.com/ca

Internal Audit of EnWin Utilities Ltd. – Phase A

April 10, 2013

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April 10, 2013

Ms. Helga Reidel
Chief Administrative Officer (CAO)
The Corporation of the City of Windsor
350 City Hall Square West
Windsor, Ontario N9A 6S1

Dear Ms. Reidel:

Please find attached our Internal Audit Report on EnWin Utilities Ltd.– Phase A.

In this phase we examined four specific matters: dividend payments; credit card usage for executives; executive and board compensation and board and committee attendance.

We would be pleased to answer any questions you have.

Yours truly,

PricewaterhouseCoopers LLP

PricewaterhouseCoopers LLP

Encl.

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Contents

Executive summary

Overview and Approach

Our work was performed in accordance with the International Standards for the Professional Practice of Internal Auditing and the Canadian Institute of Chartered Accountants (CICA). The CICA provides guidance on conducting value for money and compliance audits. Value for money (VFM) focuses on whether money was spent with due regard for economy and efficiency and whether appropriate procedures were in place to measure and report on effectiveness of service delivery.

Conducting value for money audits are useful exercises as part of a "continuous improvement" strategy for any corporation. Throughout government and also in the private sector, a focus on economy, efficiency and effectiveness serves to continuously improve an organization.

We completed our review of four (4) items identified by City Council:

- Dividend Payments
- Credit Card Usage for Executives
- Executive and Board Compensation
- Board and Committee Attendance

For each item, we set out an audit objective and developed audit criteria that cover key systems, policies, and procedures that should be in place and operating effectively. Our testing period was 2007 to 2012 years as that aligns with the period those financial records need to be retained for statutory purposes (total 6 years, current year plus prior 5 years).

At the outset, EnWin's senior management agreed to the objectives and criteria which were previously proposed by PwC in consultation with City management. Tests and procedures were carried out to address our audit objective and criteria.

Summary Conclusions:

Dividend Payments:

The EnWin dividend policy and payment amount is consistent with what other Local Distribution Companies (LDCs) are paying in Ontario and a process exists to regularly review its effectiveness. The policy is also consistent with the company strategy and the shareholder declaration.

EnWin has been able to establish a policy that balances the competing interests of shareholders and ratepayers in making dividend decisions. The need for balance was established by the regulator, the Ontario Energy Board (OEB) in a 2010 legal decision with another local distribution company. The regulator has a right to intervene when it determines a dividend is too high. In this way, the regulator achieves its dual objective of: (i) protecting the interests of

consumers with respect to prices and the adequacy, reliability and quality of electricity services; and (ii) facilitating the maintenance of a financially viable electricity industry.

This balance is necessary to ensure that an LDC does not take excessive cash out of the business through high dividends rather than spending that money on the capital expenditures needed to maintain its infrastructure.

Whether an LDC does or does not pay a dividend to its shareholder (in this case, the City) has no impact on the amount of the ratepayer's hydro bill. When a dividend is not paid it simply means more cash would be available for the utility and less cash for the City to use on municipal programs. Dividend payments do not make up part of the calculation of hydro rates, as electricity rates are the same regardless of the payment of a dividend.

Dividends are the only manner that a shareholder receives a return on its investment (other than a sale of the utility). Virtually all LDCs make payments to their municipal shareholders. EnWin Utilities Ltd.'s 2011 $3.75 million dividend to Windsor Canada represents a 3.5% yield, on an asset book value of $108 million (per 2011 financial statements). In turn Windsor Canada Utilities paid a $5 million dividend to The Corporation of the City of Windsor. A yield of 3.5% is consistent with what other utilities are yielding. By way of comparison, a utility close in size to EnWin (Burlington Hydro) with a book value of $63.7 million paid a $2.55 million dividend in 2011, which equates to a 4.0% yield. It should also be noted that Hydro One made a dividend payment of $168 million in 2011 to the Province of Ontario. The only LDC identified that does not pay a dividend is Thunder Bay Hydro. Thunder Bay Hydro does have a Return on Equity built into its hydro rates (est. 7% for 2013), it is profitable and it does make payments in lieu of taxes (PILs), but it keeps all the remaining cash in the LDC rather than paying part of it to the City of Thunder Bay as a dividend.

EnWin should continue to monitor the market place comparables to ensure that the appropriate balance continues to be achieved between the ratepayer and the financial viability of the utility.

Credit Card Usage for Executives:

There is currently no credit card usage for executives. The use of credit cards was stopped in 2007. We did review those few transactions from 2007 and found no issues. Board members have never been issued a credit card.

When EnWin stopped using credit cards for its executives it moved to an "expense re-imbursement" process, consistent with the policy in place for Board members. Each individual submits an expense report with the appropriate support and they are re-imbursed. We have recommended that expense reports since 2007 are reviewed as part of Phase B of our audit.

Executive and Board Compensation:

Executive and board compensation is consistent with external benchmarks and the company regularly reviews the marketplace to ensure that compensation is fair and reasonable. This is done for both employees and those who serve on boards and committees. EnWin should continue to periodically survey the marketplace to ensure that executive and board

compensation continues to be at the right level. Generally, compensation is paid at the lower end of the range for comparable companies.

However we found three instances where EnWin can improve the governance framework over compensation:

- EnWin, has an incentive pay strategy for its executive. Incentive pay for executives is paid less than what the strategy has stipulated. The Board has deviated from the strategy by arbitrarily reducing the incentive payments that would have otherwise resulted in higher compensation for executives as contemplated by their strategy. The process starts with examining general corporate results but the calculated payments have been arbitrarily reduced by the Board or a committee thereof. Incentive payments for executives should be determined based on clear and transparent metrics that are established at the **start** of the year and approved by the Board of Directors or a committee thereof without the arbitrary reductions in compensation at the end of the process. There should be no arbitrary deviations from the compensation methodology.

- Approvals for incentive pay should be formalized with clear supporting documentation that indicates the quantum of incentive pay being awarded as it relates to corporate and individual performance. This could be accomplished by utilizing a standard template that highlights the key metrics that were set at the start of the year and the results achieved against those metrics.

- The shareholder declaration states that the company desires to follow the TSX corporate governance guidelines. Adopting the TSX corporate governance guidelines is an excellent initiative for a corporation under the Ontario Business Corporations Act, with public debt holders, and operating in a regulated monopoly business. It appears that EnWin's compensation governance does not align with these guidelines and we recommend that EnWin develop a governance framework for compensation that includes a "road map" to become fully compliant with these guidelines. Doing so will assist EnWin in attracting good people for key roles in a competitive industry marketplace.

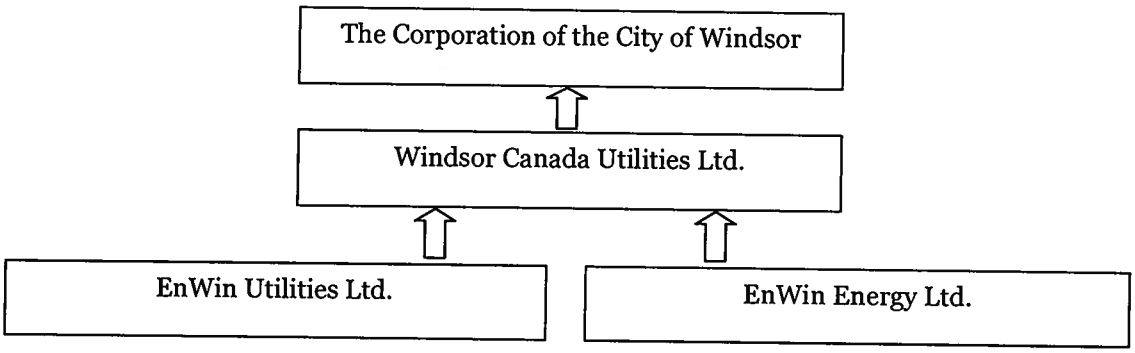
Board and Committee Attendance:

Board and committee compensation is paid consistent with external benchmarks. Payments are accurate based on meetings attended and attendance records are up to date.

1. Dividend Payments

Background:

Since 2005 EnWin Utilities and/or EnWin Energy have been paying dividends to its parent company Windsor Canada Utilities who in turn have been paying dividends to their shareholder, The Corporation of the City of Windsor.



The differential between Windsor Canada Utilities dividends to the City of $23.678 million and EnWin Utilities dividends to Windsor Canada Utilities of $20.678 million are dividend and similar returns paid by EnWin Energy to Windsor Canada Utilities of $3 million. It total, the City has received dividends of $23.678 million since 2005 from the EnWin Group of Companies.

WINDSOR CANADA UTILITIES LTD.
DIVIDEND HISTORY

(000's)	2011	2010	2009	2008	2007	2006	2005	**TOTAL TO CITY**
Dividends – Declared	$5,000	$3,000	$5,000	$4,000	$3,000	$2,000	$1,678	**$23,678**

ENWIN UTILITIES LTD.
DIVIDEND HISTORY

(000's)	2011	2010	2009	2008	2007	2006	2005	**TOTAL TO WCU (above)**
Dividends – Declared	$3,750	$2,250	$4,000	$4,000	$3,000	$2,000	$1,678	**$20,678**

There has been some public debate on the need for EnWin to pay a dividend. It is our understanding that dividends were not paid prior to 2005 because the corporation was not in a financial position to pay a dividend. Through our research we determined that most LDCs in Ontario pay a dividend. We are only aware of one utility (Thunder Bay Hydro) that has chosen not to pay a dividend as a matter of policy. A few examples of other utilities that pay a dividend, are Hydro One Brampton at $10.4 million; London Hydro at $2.5 million, Veridian at $4.9 million. On the low end, some smaller utilities, even small LDCs like Woodstock Hydro paid a

dividend of $0.115 million. (All amounts are 2011 data). One can see that there is variability, but at $3.75 million, EnWin is within the range of other utilities.

LDCs are incorporated, as is required under Section 142 of the Electricity Act. Under the Ontario Business Corporations Act (OBCA) corporations have the right to declare a dividend to the shareholders, on the authority of the Board of Directors. The board members, who are appointed by the shareholders and are tasked to act in the best interest of the company, provide the control through governance to ensure that the right amount of dividend is declared.

For the electricity sector, an added oversight control exists, over and beyond that of the Board of Directors. This additional oversight is provided by the regulator, the Ontario Energy Board.

The OEB has the provincial statutory mandate to regulate this industry in which LDCs operate as monopolies. The OEB is required to **balance** the competing interests of the utility shareholders against the interests of the ratepayers. The OEB is mandated to "protect the interest of consumers with respect to prices and the adequacy, reliability and quality of electricity services". The principal way the OEB achieves this is by setting "just and reasonable rates".

Section 1 of the Ontario Energy Board Act, 1998 states the Board objectives include:

(1) To protect the interests of consumers with respect to prices and the adequacy, reliability and quality of electricity services; and

(2) To promote economic efficiency and cost effectiveness in the generation, transmission, distribution, sale and demand management of electricity and to facilitate the maintenance of a financially viable electricity industry.

The key concept is **balance**. To balance the interests of ratepayers in terms of prices and service while at the same time ensuring a financially viable electricity industry that is both economically efficient and cost effective.

In the 2010 Ontario Court of Appeal decision involving Toronto Hydro Electric System Limited and Ontario Energy Board it was established that the OEB has the right to intervene when it determines that a dividend is too high. Briefly, the case facts here center on the fact that during 2004-2005 Toronto Hydro Corporation paid over $116 million to the City in the form of dividends and interest payments.

This case established the principles that govern regulated utilities which operate as monopolies, from those that apply to private sector companies, which operate in a competitive environment. This distinction is critical as:

(1) Directors and officers in a business corporation have a fiduciary obligation to act in the best interests of the company; but

(2) In a business corporation that is a regulated utility, the best interests of the company have an additional requirement: **balancing** the interests of the utility's shareholders with the interests of the ratepayers.

If a utility fails to operate in this way, this case confirmed the legal authority of the OEB to intervene in order to strike this **balance** and protect the interests of the ratepayers.

The key question for EnWin is whether the level of dividend being paid to the City strikes the **balance** of competing interests (shareholder and ratepayers).

Our audit sought to discover whether policies and procedures exist at EnWin to ensure this **balance** is achieved.

Audit Objective and Scope:

Objective:

The objective is to assess whether EnWin has adequate policies and procedures in place so that:

- Reasonable oversight is provided over the dividend payments such that they are competitive and fair;
- The EnWin policy is reasonable when compared to other utilities;
- Actual payments made are aligned with the policy

Scope:

- Reviewed relevant legislation, OEB cases and the history of dividend payments in Ontario.
- Compared EnWin dividend payment history to other utilities, in particular Thunder Bay who do not pay a dividend.
- Reviewed policies and procedures and conducted interviews including persons outside of EnWin.
- Reviewed Shareholder Declaration and the history of dividends since 1999.

Criteria:

Our criteria, which management agreed to are:

(1) Dividend payment policy is consistent with what other LDCs are paying in Ontario;
(2) A process exists to regularly review the effectiveness of the dividend policy;
(3) Dividend payment is consistent with the City of Windsor and EnWin business strategy; and
(4) Dividend policy is consistent with the Shareholder Declaration.

Summary Conclusions:

The EnWin dividend policy is consistent with what other LDCs are paying in Ontario and a process exists to regularly review its effectiveness. The policy is also consistent with the company strategy and the Shareholder Declaration. EnWin has followed the policy, company strategy and Shareholder Declaration in paying dividends to its shareholder, the City.

As discussed earlier, utilities need to be mindful of the **balance** between the competing interests of shareholders and ratepayers in making dividend decisions. While the payout rate of a dividend is always prone to debate, it would appear that EnWin's various stakeholder interests are being considered and balanced, especially when one considers the consistency of the dividend amount over the last number of years, the reinvestment of $106 million through capital expenditures from 2005-2011, and the reduction of total debt by $46 million since 2005. EnWin has paid dividends when it has positive net income, which is consistent with commercially reasonable business practices. A positive net income and the ability to pay dividends are two indicators of good financial management.

2. Credit Card Usage for Executives

Background:

The policy regarding the use of corporate credit cards for executives changed effective April 2007 to an expense report-based system. Executives are reimbursed for business expenses incurred by submitting a standard template claim form that has been developed for this purpose.

We understand that EnWin instituted this change to mitigate the risk that a corporate credit card might accidentally be used for a personal expenditure.

For our review there were limited credit card transactions to review, with the most recent activity being from early 2007.

Audit Objective and Scope:

Objective:

The objective is to assess whether EnWin has adequate policies and procedures for credit card usage so that:

- Reasonable oversight is provided to ensure that credit card usage amounts are competitive and fair;
- The EnWin policy is reasonable when compared to other like entities
- Actual payments made are aligned with this policy;

Scope:

- Policies and procedures
- Management interviews
- EnWin Credit Card Policy
- No usage recently but in past did have credit cards (prior to Jan. 2007)
- Review data for last 6 years (statutory limit for retaining records)

Criteria:

Our criteria, which management agreed to are:

(1) Payments comply with corporate policy;
(2) Oversight governance is in place;
(3) Payments are accurate and complete; and
(4) Payments are made on a commercially prudent basis (no personal expenses).

Summary Conclusion:

The use of credit cards was discontinued in 2007. For the limited transactions we reviewed from early 2007 we found that there was reasonable oversight, the policy was reasonable, and payments made were accurate and complete and made on a commercially prudent basis.

The expense re-imbursement policy since 2007 allows for payments based on submission of an expense claim. We have recommended that the expense re-imbursement policy be reviewed as part of our work in Phase B.

3. Executive and Board Compensation

Background:

EnWin participates in various compensation surveys with other LDCs to regularly review compensation levels. The Board of Directors and its committees evaluate whether current compensation is consistent with other similar entities. The objective is to ensure that the compensation is within the ranges provided in the survey results.

Audit Objective and Scope:

Objective:

The objective is to assess whether EnWin has adequate policies and procedures for executive and board compensation so that:

- Reasonable oversight is provided to ensure that executive and board compensation levels are competitive and fair;
- The EnWin policy is reasonable when compared to other similar entities; and
- Actual payments made are aligned with the policy

Scope:

- External compensation benchmarks from other utilities in Ontario;
- Internal governance processes;
- Governance processes that exist at other LDCs in Ontario; and
- Compensated departures over the last 6 years.

Criteria:

Our criteria, which management agreed to are:

(1) Compensation paid is consistent with external benchmarks;
(2) Oversight governance over compensation exists;
(3) Regular process exists to measure and report on executive compensation; and
(4) Compensated departures are handled in accordance with employment contract.

Summary Conclusion:

Executive and board compensation is consistent with external benchmarks and the company regularly reviews the marketplace to ensure that compensation is fair and reasonable. This is done for both executives and those who serve on boards and committees. EnWin should continue to periodically survey the marketplace to ensure that executive and board compensation continues to be at the right level.

However, there are three areas where the company can improve the governance framework over executive compensation:

- EnWin, has an incentive pay strategy for its executive. Incentive pay for executives is paid less than what the strategy has stipulated. The Board has deviated from the strategy by arbitrarily reducing the incentive payments that would have otherwise resulted in higher compensation for executives. The process starts with examining general corporate results but the calculated payments have been arbitrarily reduced by the Board or a committee thereof. Incentive payments for executives should be determined based on clear and transparent metrics that are established at the **start** of the year and approved by the Board of Directors or a committee thereof without the arbitrary reductions in compensation at the end of the process. There should be no arbitrary deviations from the compensation methodology.

- Approvals for incentive pay should be formalized with clear supporting documentation that indicates the quantum of incentive pay being awarded as it relates to corporate and individual performance. This could be accomplished by utilizing a standard template that highlights the key metrics that were set at the start of the year and the results achieved against those metrics.

- The shareholder declaration states that the company desires to follow the TSX corporate governance guidelines. Adopting the TSX corporate governance guidelines is an excellent initiative for a corporation under the Ontario Business Corporations Act, with public debt holders, and operating in a regulated monopoly business. It appears that EnWin's compensation governance does not align with these guidelines and we recommend that EnWin develop a governance framework for compensation that includes a "road map" to become fully compliant with these guidelines. Doing so will assist EnWin in attracting good people for key roles in a competitive industry marketplace.

4. Board and Committee Attendance

Background:

Windsor Canada Utilities, EnWin Utilities and EnWin Energy each maintain a Board of Directors to provide appropriate corporate governance oversight to each of the entities. Windsor Canada Utilities and EnWin Utilities also have formed subcommittees to achieve more specific mandates and report to the Board.

It is normal practice for each entity to compensate members of the Board and Subcommittees in the form of an annual retainer and a fee per meeting attended. The rationale is that these fees will attract appropriate candidates with the necessary qualifications and compensate them for their time, risk and responsibility assumed when carrying out their role.

Compensation is informally monitored by participation in LDC studies from time to time, but is not required by the Shareholder Declaration.

Board meeting minutes are taken and filed with legal counsel. Attendance is reported to the HR department for calculation of compensation.

Audit Objective and Scope:

Objective:

The objective is to assess whether EnWin has adequate policies and procedures for board attendance so that:

- Reasonable oversight is provided to ensure that board and committee compensation levels are competitive and fair based on attendance;
- The EnWin policy is reasonable when compared to other utilities; and
- Actual payments are aligned with policy

Scope:

- External compensation benchmarks from other utilities in Ontario;
- Internal governance processes;
- Governance processes that exist at other LDCs in Ontario;
- Payments made in last 6 years;
- Minutes confirming attendance; and
- Attendance records.

Criteria:

Our criteria, which management agreed to are:

(1) Compensation paid is consistent with external benchmarks;
(2) Oversight governance is in place. Regular process exists to measure and report on board and committee compensation levels;
(3) Payments are accurate based on meetings attended; and
(4) Attendance records are maintained and up to date.

Summary Conclusion:

Board and committee compensation is paid consistent with external benchmarks, particularly that of other LDCs. Payments are accurate based on meetings attended and attendance records are up to date.

5. Detailed Observations

1. Dividend strategy is consistent with benchmark data		
	• *Dividend policy consistent with other LDCs in Ontario* • *A process exists to regularly review the effectiveness of the dividend policy* • *Dividend is consistent with City of Windsor and EnWin business strategy* • *Dividend policy is consistent with shareholder declaration*	☐ Major – Action ☐ Moderate - Attention ☐ Minor- Consider ☑ Status Quo

Observation:

EnWin's dividend of $4 million per year is consistent with other LDCs and the wider utility market. We are aware of only one utility (Thunder Bay Hydro) who has a different policy and do not pay a dividend. With a book value of $108 million (per 2011 annual report) the EnWin dividend provides a yield of 3.5% to the shareholder (City of Windsor). This is within the range of that being paid at other LDCs.

EnWin's policy for dividend payout is within the range of 25-55% of net income, which is consistent with that of other LDCs.

Risk Implication:

Not paying a dividend deprives the shareholder of a return on its investment. A shareholder's return can be through capital appreciation or dividends. The Board of Directors and secondarily the OEB provide governance over whether the dividend effectively balances the competing interests of the ratepayers and the shareholder.

Recommendation:

EnWin should continue to periodically survey the marketplace to ensure that the dividend continues to be at the right level. The OEB as the regulator is tasked to ensure that the utility continues to operate as a financially viable entity. As was seen in the past, in relation to another LDC, the OEB will step in if it determines the dividend is too high at the cost of not maintaining a financially viable utility company.

Management Response	Owner (Date)
Enwin accepts the findings	Enwin Utilities Board and Management (ongoing)

2. Executive incentive pay requires a more formalized measurement and approval system.		☐ Major – Action ☑ Moderate - Attention ☐ Minor- Consider ☐ Status Quo
Criteria	• *Oversight governance over compensation exists*	

Observation:

The incentive payments to the executives should adhere to a methodology exclusively tied to Key Performance Indicators. While we reviewed various corporate metrics showing good operating results for Enwin (compared to other utilities in Ontario) and incentive pay comparable to benchmarks the methodology to calculate incentive pay should not include deviations to arbitrarily change those calculations. In this case, the deviations significantly reduced the payments.

Risk Implication:

If metrics are not clearly adhered to there is a risk that the payment is not properly supported. Having defined and specific Key Performance Indicators, they should be applied without deviation to ensure there is no disagreement with the final results between the employer and employees.

Recommendation:

Approvals for incentive pay should be formalized with clear supporting documentation that indicates the quantum of incentive pay being awarded as it relates to corporate and individual performance.

A standard methodology including a template that can be adhered to should be developed that uses the key metrics that were set at the start of the year and the corporate and individual results achieved against those metrics to determine incentive payments without deviation.

Management Response	Owner (Date)
EnWin currently has incentive compensation processes for all of its employee groups. For unionized staff, the process is enumerated in the collective agreement. For non-union, non-executive staff, the process involves a standard template which is also considered in reviewing the executive staff. The results of the three processes are presented to the Board or a committee thereof each year with recommendations for disbursement according to each process. Enwin accepts the findings	Enwin Utilities Board and Management (Dec.31, 2013)

3. Executive and Board Compensation consistent with benchmark data		
Criteria	• *Compensation is consistent with external benchmarks.*	☐ Major – Action ☐ Moderate - Attention ☐ Minor- Consider ☑ Status Quo

Observation:

Executive and board compensation is consistent with external benchmarks. Management and the board do have procedures in place to ensure that executive and board compensation is consistent with other LDCs, public corporations and other similar sized entities in the transmission business.

Risk Implication:

Executive and board committee members have important roles to play to ensure that EnWin operates effectively.

In order to attract and retain competent executives and other staff, EnWin needs to compensate them at a reasonable level given current market conditions. Given the specialized nature of an electrical distribution company, the pool of talent to draw from is limited.

To attract effective board members, EnWin needs to remunerate them at appropriate levels. Inadequate compensation may prevent sufficiently qualified and suitable candidates from applying for the role.

Recommendation:

EnWin should continue to periodically survey the marketplace to ensure that executive and board compensation continues to be at the right level.

Management Response	Owner (Date)
Enwin accepts the findings	Enwin utilities Board of Management (ongoing)

4. Roadmap needs to be developed for following TSX Corporate Governance Guidelines		☑ Major – Action ☐ Moderate - Attention ☐ Minor- Consider ☐ Status Quo
Criteria	• *Oversight governance over corporate activities exists (executive compensation, board compensation)*	

Observation:

EnWin's Shareholder Direction states "The shareholder expects the Board to observe substantially the same standards of corporate governance as may be established from time to time by the Toronto Stock Exchange.....for publicly traded corporations with such modifications as may be necessary to reflect the fact that the Corporation itself is not a publicly traded corporation."

Examples of some areas covered by the TSX Corporate Governance framework include: strategic planning process, risk identification process, succession planning, communications policy, integrity of internal control and management information systems.

EnWin does not track its governance framework with reference to the various elements of the TSX Corporate Governance framework. At least insofar as compensation practices are concerned, we observed that the TSX Corporate Governance framework was not followed.

Risk Implication:

The TSX Corporate Governance framework provides "best practises" on how a publicly traded corporation should be governed. While EnWin is not a publicly traded company, its debt is held by institutional investors and the Shareholder Declaration directs EnWin to behave like a publicly traded entity where appropriate. Following the TSX Corporate Governance framework would provide greater rigour over how the business is governed expected by those with commercially reasonable expectations, such as customers, shareholders, the regulator, investors, and credit rating agencies.

Recommendation:

EnWin should identify the key aspects of the TSX Corporate Governance guidelines and develop a road map (with target dates) for adopting them.

Management Response	Owner (Date)
Enwin accepts the finding	Enwin Utilities Board and Management (Dec.31st, 2013)

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Internal Audit of EnWin Utilities Ltd. – Procurement Process

May 6, 2014

pwc

May 6, 2014

Victoria Zuber
Chief Financial Officer (CFO)
EnWin Utilities Ltd.
787 Ouellette Avenue
Windsor, Ontario N9A 5T7

Dear Ms. Zuber,

Please find attached our Internal Audit Report on the Procurement process.

We would be pleased to answer any questions you have.

Yours truly,

PricewaterhouseCoopers LLP

PricewaterhouseCoopers LLP

Encl.

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Contents

Executive Summary

Overview and Approach

Our work was performed in accordance with the International Standards for the Professional Practice of Internal Auditing and the Canadian Institute of Chartered Accountants (CICA).

We used a Value for Money (VFM) audit approach. The CICA provides guidance on conducting value for money and compliance audits. Value for Money focuses on whether money was spent with due regard for economy and efficiency and whether appropriate procedures were in place to measure and report on effectiveness of service delivery.

Our approach was:

- Establish an audit objective;
- A scope was defined that establishes our population for testing;
- Criteria to be tested was established which was agreed to with management;
- A conclusion on our testing along with internal audit recommendations and management's action plans to address these recommendations.

The scope of our work involved approximately $30 million in expenditures and a vendor population of 400 (active vendors). We tested procurements for the years 2012 and up to July of 2013. Our testing commenced in August 2013. We performed financial, operational and compliance testing. We also performed data analytics for the Vendor Master and Employee Master database.

Our financial testing covered the ordering process; invoice processing; payments; vendor management; standing data maintenance; and segregation of duties and restricted access.

Our operational and compliance testing covered corporate governance over the procurement process.

In our report we have grouped our testing and criteria into four categories:

- Reasonable Oversight;
- Reasonable Policy;
- Policies Implemented;
- Reasonable Results.

Summary Conclusions:

Reasonable Oversight:

The EnWin Purchasing Policy and procedures provide for reasonable oversight. Our testing found that procurement is conducted in accordance with EnWin's policies. However Board approval levels are out of alignment with comparable companies. Management needs to continually monitor whether approval levels need to be adjusted based on business needs and the timeliness of conducting transactions.

Financial controls are satisfactory and our testing of the payments system did not reveal any issues with the Purchasing and Payables process:

- Purchase orders and invoices are complete, accurate, valid and processed in a timely manner;
- Payments due are paid accurately and only once to the appropriate vendor;
- Changes to standing data are complete, accurate and valid;
- Good segregation of duties exists.

Our review of a sample of procurement files found that:

- Well defined strategy does exist involving all stakeholders;
- Needs assessment is completed prior to initiating work;
- Sufficient planning is performed;
- Scope of work is well documented;
- Competitive tendering does occur;
- Agreements are authorized appropriately;
- Regular ongoing oversight over agreements does occur;

Four opportunities for improvement exist:

The first opportunity is **Board approval methodology for procurements should be better aligned with those of comparable utilities**. **Necessary and sufficient board authorization occurs when the annual budget is approved. Subsequent authorization of expenditures is not necessary.** Currently all contractor services >$100,000 and consulting services >$100,000 need to be approved by the Board of Directors both in approving the budget and in awarding of procurement contracts. With the current procurement authorization methodology Board members become too involved in the day-to-day management of the corporation and are going beyond performing their oversight governance role.

We sampled five other utilities of similar size and found that the $100,000 level for Board Approval at EnWin was the lowest. Our sample involved utilities with a customer base from 50,000 to 300,000. Boards approved the annual operating and capital budget. For expenditures outside of the budget the range of Board approval for operating expenses was from $50,000 to $500,000 and from$50,000 to $2.5 million for capital.

Board Approvals of Operating and Capital Procurements

Utility	Budget	Subsequent – Within Budget	Subsequent – Beyond Budget
1	Yes	$1 million	$100,000
2	Yes	No	$2.5 million
3	Yes	No	$100,000
4	Yes	No	$500,000 ($1 million for capital)
5	Yes	No	$50,000
EnWin (Current)	Yes	Yes	$100,000
EnWin (Recommended)	Yes	$1 million	$100,000

Further the EnWin policy should distinguish between "budget approved expenditures" (which do not require individual Board approval since the budget was already approved by the Board) and "non-budgeted" expenditures which do require individual Board approval.

The second is to **explore alternative tendering options.** We reviewed one project awarded as part of the 2012 capital plan. The purchasing policy has been focused on awarding work based on least cost. However EnWin relies extensively on outsourced construction providers to maintain the grid. For 2013 and the next 5 years the capital plan is about $15 million per year with 40 percent being completed by contractors. It is critical that long term sustainable relationships be developed with reliable contractors rather **than always going to** tender. One option to reduce costs would be to tender for multiple contracts rather than do only one at a time.

The reliability and sustainability of the grid is EnWin's most critical risk so we recommend a process that does not always award work based exclusively on least cost. Suppliers effectively become an extension of EnWin's work force and should conform to EnWin's quality control and safety protocols. Suppliers can be more cost competitive when a tender goes out for multiple contracts. This is also more efficient from an administrative perspective.

The third area identified is **performing joint procurements with other local distribution companies (LDC).** Many utilities face issues that are common. We are aware of some that have teamed up to provide information technology solutions (customer information system). In this way development costs are shared. We understand there is a current joint procurement with the City of Windsor for the supply of fuel for vehicles.

EnWin's policies should be updated to reflect the processes that will be followed for joint procurements and the areas where this can be undertaken. Rather than just focusing on lowest cost consideration should always be given to balancing the three key elements that will contribute to EnWin's success (i) providing reliable service; (ii) that is sustainable; and (iii) at least cost.

In our review of the new customer information system file (CIS) we did note that opportunities were explored with other LDCs. We concur with EnWin's determination that in the case of the CIS a joint initiative with one or more other LDCs was not the best economic option. There will likely be other occasions where EnWin has identical challenges to other LDCs and the ability to procure jointly should always be an option that is considered.

The fourth area identified is **monitoring and control over sole source and single sourcing.** Currently this is not monitored and reported back to the Board. There will be occasions where it makes business sense to enter into these arrangements. Sole

source for those cases where there is no other source of supply (e.g. Company does checks for stray voltage and works with some of the LDCs in Ontario) and single sourcing where it is decided not to enter into competitive bids and a supplier is selected for strategic reasons.

We recommend that policies be developed around sole and single sourcing and the purchasing policy be updated accordingly. Management should monitor and report to the Board the number of sole and single sourcing procurements that EnWin is entering into. Board reporting should be on a statistical basis (e.g. Percentage of sole source and single source as a percentage of the total population) rather than individual, specific details.

In Appendix B we provide factors to consider in developing a sole source/single source procurement policy.

Reasonable Policy:

The existing policy has served EnWin well but it is ready for an update as it was last updated February 16, 2012.

Our testing confirmed that procurement policy is effective in sourcing services and it is somewhat consistent with other LDCs with which we are familiar. Agreements we reviewed comply with corporate policy. The materials reviewed comply with Ontario Energy Board (OEB) policy.

As highlighted under "Reasonable Oversight" an opportunity exists to enhance the policy by including sections on (i) Board approval levels should be reviewed ; (ii) alternative tending options be considered (iii) performing joint procurements with other LDCs and (iv) monitoring of sole and single source vendors.

Policies Implemented:

Management is responsible to ensure that transactions are completed in accordance with EnWin's corporate policies.

Our testing confirmed that policies have been appropriately implemented. Project management is effective. Terms of agreements are adhered to and purchasing projects selected for review did comply with the purchasing policy and procedures. Purchase orders are issued and approved and contracts are approved appropriately. Payments are only made after a three way match occurs between the invoice, purchase order and the contract terms.

We also did a match between the vendor and employee master data base (as part of our data analytics testing) to uncover any potential conflict situations. One potential situation was identified and we reviewed the file and found no anomalies.

There are two opportunities for improvement:

The SAP system spending limit controls have not been turned on and in one case in our sample spending was exceeded by a small amount ($500) relative to the authorized procurement ($140,000). While we recognize this is a very small amount an opportunity does exist to turn on this feature in SAP so that this control is active and it will help to prevent spending above the limit that has been set through the procurement process.

Secondly, our data analytics showed that data quality could be improved. While we understand that SAP does provide flexibility in terms of how various fields are set up we did discover that there are 2,734 vendor records in the system however there are only about 400 active vendors. An opportunity exists to cleanse the data in the vendor master data records in order to remove inactive vendors from the system

Reasonable Results

Achieving durable value and sustaining economic performance is critical for EnWin's success. Overall we found that transactions are conducted with giving consideration to value for money. Management does consider obtaining the best value in their procurement decisions.

One area that could be improved is EnWin does not have a "vendor assessment process". To develop positive long term relationships with vendors it is essential that a vendor management process be developed. In this way vendor performance can be monitored continually. If any issues develop they can be dealt with quickly through the vendor assessment process.

Category	Criteria	Pass/Fail	Comments
1. Reasonable Oversight	Well defined strategy prepared for completing the project involving all stakeholders; Needs assessment was completed prior to initiating work; Sufficient planning was performed so that scope of work could be adequately planned; Scope of work is documented at sufficient breadth and depth in order that informed bids can be prepared; Company procurement practices were adhered to; Procurement provides for a competitive tendering process in awarding contracts; Agreements were authorized by appropriate signing authorities; Regular ongoing oversight is performed by management over the agreements to ensure their ongoing effectiveness of service delivery; Regular Board oversight occurred over the agreements; Windsor Canada Utilities Ltd. periodically makes a report to the City Council on EnWin's compliance with the shareholder direction;	Pass	Four improvement areas 1.1, 1.2, 1.3, 1.4
2. Reasonable Policy	Purchasing policy is effective in sourcing; Policy consistent with other LDCs; Agreements comply with corporate policy; Agreements conform with legislation (OEB);	Pass	Same four improvement areas identified above
3. Policies Implemented	Effective project management was in place and progress monitored regularly to ensure deliverables met and project cost within budget; "Scope creep" is controlled; Terms of agreement have been adhered to; Project follows Purchasing Policy and procedures; Purchase orders issued and approved; Contracts signed before work commences; Payments made based on achieved results and not billable hours; Sole sourcing is appropriate; Payments made after three way match (invoice-purchase order-contract terms); Billings evaluated against project process;	Pass	Two improvement areas identified 3.1 and 3.2
4. Reasonable Results	Transactions are conducted using VFM; Effectiveness of service delivery is measured by conducting post-project review; An active vendor management process exists so that vendor performance is continually monitored.	Pass	One improvement areas identified 4.1

Detailed Commentary

Audit Objective and Scope:

Objective:

Assess whether EnWin's Procurement process is designed and operating effectively to ensure that a fair and competitive procurement process exists.

Background:

EnWin Utilities Ltd. undertakes approximately $30 million in purchases in a given year from approximately 400 different vendors. The procurement process consists of several different types of purchasing transactions including capital purchases, material/subcontracting purchases, purchasing cards, operating expenditures and purchasing agreements/ongoing contracts.

Currently, a purchasing policy and procedures manual exists which outlines the key procedures in place over the various types of purchasing transactions. Management has undertaken a project to update and revise, as necessary, the current purchasing policy. In doing so, management's focus has been on ensuring the policy is appropriate. This includes ensuring it is consistent with the shareholder (City of Windsor) vision and consistent with the policies of other LDCs.

The purchasing department consists of a purchasing manager, a supervisor and two buyers and all purchasing for the company is centralized through this purchasing department. The processing of invoices and payments are administered by the finance department which is led by the Director of Finance. Some internal controls are embedded into the software system, however manual controls are still required and as such, there is a mix of both automated and manual controls in the processing of purchases and payments.

Scope:

- Project charter and needs assessments for entering into procurement process;
- Agreements between EnWin and vendors;
- Project business case;
- Project governance documentation;
- Applicable legislation;
- EnWin procurement policies;
- Contract documentation;
- Submitted proposals from vendors;
- Proposal evaluations, contracts, invoices, payment records;
- Board minutes;
- Management interviews;
- Sole source documentation;
- Sample procurements from 2012 and 2013;

1. Reasonable Oversight

Background:

Oversight occurs at the executive management and Board levels. The executive team is appointed to run the business and to provide assurance to the Board of Directors that the objectives of the organization are being achieved. This oversight involves supervising those they manage, ensuring procurement is consistent with EnWin's strategy, risk tolerance and that policies are approved by the Board. The Board is accountable to the shareholder for EnWin's strategy and performance. In addition, they are accountable to the debt holders to ensure the long term sustainability of the corporation.

Conclusion:

Reasonable oversight is provided over the procurement process and EnWin's policy is comparable to other utilities. To strengthen oversight four areas have been identified:

(i) Board approval levels should be reviewed:
(ii) Tender for multiple contracts to gain efficiencies;
(iii) Perform joint procurements with other LDC's; and
(iv) Sole source and single source source procurements should be monitored.

2. Reasonable Policy

Background

Policies are designed to ensure management has the appropriate framework to deal with day to day business. Policies delegate authority to respective individuals.

Conclusion:

The existing policy has served EnWin well, however opportunities exist to update it for:
(i) Strategic sourcing of vendors;
(ii) Performing joint procurement with other LDCs and
(iii) Monitoring of sole source and single source single source vendors.

3. Policies Implemented

Background:

EnWin's management develop practices to deal with internal business transactions and its interactions with external parties (vendors, stakeholders etc.). Management is responsible to ensure that transactions are carried out in accordance with EnWin's corporate policies.

Conclusion:

Transactions are carried out in accordance with EnWin's Corporate Policies but opportunities for improvement still exist, including:

(i) Activating automated spending limit controls in SAP. This use of technology would reduce the risk of exceeding spending limits such as the instance we noted in one contract. This $140,000 contract had its limit exceeded by $500 from what was approved on the Capital Expenditure Approval form (which is not linked to the SAP system) and

(ii) Data quality could be improved:
- 8% (229 vendors) have duplicate postal codes but different addresses;
- 6% (154 vendors) have the duplicate contact information;
- 4% (113 vendors) have duplicate addresses but different vendor name;
- 2% (46 vendors) have both address and PO box populated in the Vendor Master;
- 1% (30 vendors) have duplicate vendor names;
- 1% (28 vendors) have invalid postal codes;
- 0.6% (17 vendors) has duplicate Post Office Box numbers and different vendor name.

To improve the internal control environment and ensure the accuracy, completeness and authenticity of transactions requires good data integrity. This is best achieved when vendors are first entered into the system. Automated controls should trigger when data is incomplete or duplicated.

Data integrity will also help to prevent fraud and identify employees who may also be vendors to EnWin. Matching the employee to vendor data base can detect these situations and help to ensure that any conflicts of interest are managed appropriately. For greater clarity, our audit found no instances of fraud or improper dealings with employees; these recommendations are to further improve risk management as a continuous improvement initiative.

4. Reasonable Results

Background:

EnWin strives to fulfill its fiduciary duties and legal obligations while at the same time creating durable value and sustainable economic performance.

Conclusion:

(i) Results overall are reasonable. One area for improvement is a vendor assessment process should be implemented. An active vendor management process will help to ensure EnWin builds a positive relationship with vendors.

1. Board approval should be reviewed		
Criteria	• Agreements authorized by appropriate signing authority • Regular based oversight is performed over management • Policy consistent with other LDC's	☐ Major – Action ☐ Moderate - Attention ☐ Minor- Consider ☑ Improvement Opp

Observation:
The first opportunity is Board approval levels for transactions should be reviewed. Currently all contractor services >$100,000 and consulting services >$100,000 need to be approved by the Board of Directors. At the current level the Board members become too involved in the day-to-day management of the corporation which goes beyond performing their oversight governance role.

We sampled five other utilities of similar size and found that the $100,000 level for Board Approval at EnWin was the lowest. Our sample involved utilities with a customer base from $50,000 to $300,000. Boards approved the annual operating and capital budget. For expenditures outside of the budget the range of Board approval for operating expenses was from $50,000 to $2,500,000 and from50,000 to $2.5 million for capital.

Risk Implication:
Board members become too involved in the day-to-day management of the business which takes away from their governance role.

Recommendation:
Board approved levels should be reviewed so that more effective governance can be achieved. Further the policy should distinguish between "budget approved expenditures" (which do not require individuated Board approval since the budget was already approved by them) and "non-budgeted" expenditures which do require individuated Board approval.

Management Response	Owner
The improvement opportunity will be brought forward for approval. Upon its approval, the current EnWin Purchasing Policy will be amended to include this change in approach for contract approvals.	

2. Tendering for multiple contracts	
Criteria	• Well defined strategy • Needs assessment completed • Company procurement practices adhered to • Competitive tendering performed in awarding Contracts • Agreements authorized

☐ Major – Action
☐ Moderate - Attention
☐ Minor- Consider
☑ Improvement Opp

Observation:

EnWin tenders for one contract at a time which can be very labour intensive. While the procurement policy is comprehensive it does focus on awarding work based on lowest cost. Having reliable partners is particularly critical for the core business – network build. We reviewed one project awarded as part of the 2012 capital plan.

For 2013 and going forward the next five years the capital plan is about $15 million per year. Of this total approximately 40 percent of the plan is completed by using contractors rather than EnWin employees

Risk Implication:

Network needs to (i) provide reliable service; (ii) that is sustainable; at (iii) least costs. Rather than just focusing on lowest cost consideration should be given to balancing all three elements. Maintaining the electrical grid is the most critical risk for a local distribution company.

Recommendation:

Consider tendering for multiple contracts to gain increased efficiencies and moving away from a "least cost" procurement process to one that develops a more strategic relationship with suppliers. Suppliers can become more cost competitive knowing that the contract terms are of a longer duration.

Management Response	Owner (Date)
The current EnWin Purchasing policy can be amended to include provisions for tendering for multiple contracts. The construct under which this approach would be undertaken requires development and approval concurrently with the policy amendment.	

3. Performing joint procurements with other Local Distribution Companies	☐ Major – Action ☐ Moderate - Attention ☐ Minor- Consider ☑ Improvement Opp
Criteria • Needs assessment completed prior to invitation • Sufficient planning performed • Procurement provides for competitive tendering in awarding contracts.	

Observation:

As many LDCs face similar challenges opportunities exist to enter into joint procurements. In our review of the Customer Information System (CIS) procurement this was explored EnWin did not proceed due to cost reasons which we found was a reasonable conclusion. We were also advised that a joint procurement is currently underway with the City of Windsor for the supply of fuel for vehicles.

Combining the purchasing power of other organizations and EnWin can yield cost advantages for both organizations. These would need to be undertaken with the oversight of the management and Boards of EnWin and the other organization to ensure that both organizations best interests are represented at all times and one is not taking advantage of the other corporation.

Risk Implication:

Risk of paying too much for certain goods or services (such as fuel for vehicles) which is a common expenditure for both organizations. Can achieve economies of scale by combining procurements with other organizations, reducing overall cost for both corporate entities.

Recommendation:

EnWin's policies should be updated to reflect the processes that they will follow for "joint" procurements. Also the goods or services where this can be undertaken should be identified.

Management and the Board of EnWin should monitor and be aware of joint procurements to ensure proper governance. Objective here is to ensure that least cost at reasonable quality is achieved fairly for both corporate entities. One entity should not be put in a position of taking advantage of the other.

Management Response	Owner (Date)
Working co-operatively with other LDC's on procurement initiatives is desirable. The challenge for a successful implementation will be the identification of which goods and services to include, the method in which to structure the co-operative, and resource commitment from the other LDC Participants.	

4. Monitoring and Control of "Sole Source" and "Single Source" procurements		☐ Major – Action ☐ Moderate - Attention ☐ Minor- Consider ☑ Improvement Opp
Criteria	• Well defined strategy • Needs assessment completed • Agreements authorized • Sufficient planning (Scope, deliverables) performed.	

Observation:

Sole and Single Source procurements are not being monitored. There will be occasions where it makes business sense to enter into these arrangements. Strategically this type of sourcing may prove to be most beneficial to EnWin's interest in the long run.

There will be occasions where it makes business sense to enter into a sole source or single source transaction. This can occur when only one vendor is uniquely capable of providing the goods and/or services required and no other vendor can provide such goods and/or services. The other situation can be an unforeseeable situation of urgency or emergency where the goods and/or services cannot be obtained by means of a competitive process as required by the procurement policy.

In order to provide proper governance a justification report should be completed and approved by the procurement department and the requesting department. It should also be approved in accordance with the company signing authority policies.

Risk Implication:

May have insufficient or excessive use of "sole" and "single" sourcing. Management and the Board are left unaware of how much of this is occurring.

Recommendation:

Policies should be developed for "sole" and "single" source procurement. The procurement manual should be updated to cover this. In Appendix "B" we provide some factors to consider in developing this policy.

Management Response	Owner (Date)
EnWin's existing purchasing policy should be amended to include criteria under which a sole or single sourcing procurement would be appropriate. Proper due diligence is required, along with proper documentation and approval process for the non-competitive approvals. A tracking mechanism will need to be established to facilitate reporting.	

5. Automated System Limit Controls not turned on in S.A.P.		☐ Major - Action ☐ Moderate - Attention ☐ Minor- Consider ☑ Improvement Opp
Criteria	• Follow EnWin Purchasing Policy and Procedures • Regular ongoing oversight occurs.	

Observation:

The system permitted total spend of $140,500 on a contract when the maximum was set at $140,000($500 over). Limits are recorded on the Capital Expenditure Approval form however this form does not have a system link with the SAP system. This was the only error we noted and while minor in size it does point to an opportunity to link the Capital Expenditure Form (where the total dollar limit is set) to the SAP system

Risk Implication:

Possibility exists to spend beyond the limit that has been set. The projects defined within SAP do not have budget dollars assigned to them within the system. We were advised that non-automated management controls have been relied upon to date.

The system in SAP should be set up so that dollar limits are not exceeded. The Capital Expenditure Approval process should be integrated with the processes in SAP While we recognize this is a very small overage an opportunity does exist to turn on this feature in SAP so that this control is active and it will help to prevent spending above the limit that has been set through the procurement process.

Management Response	Owner (Date)
Management is currently reviewing the opportunity to utilize the functionality of budget controls within SAP. The SAP Project Systems Module was designed with control limits that would reject new commitments and time confirmation postings that exceed beyond 110% of the budget. Management is currently reviewing this feature to satisfy the opportunity noted above and build this control within the system.	

6. Data Quality Could Be Improved		
Criteria	• Conformance to Purchasing Policy and Procedures • Transactions are conducted that demonstrate value for money (VFM) • Payments made after three way match (invoice-purchase order – contract	☐ Major - Action ☐ Moderate - Attention ☐ Minor- Consider ☑ Improvement Opp

Observation:

We observed 2,734 vendor records however there are only 400 active vendors. This indicates that the vendor master record should be cleansed. Specifically:

- 8% (229 vendors) have duplicate postal codes but different addresses;
- 6% (154 vendors) have the duplicate contact information;
- 4% (113 vendors) have duplicate addresses but different vendor name;
- 2% (46 vendors) have both address and PO box populated in the Vendor Master;
- 1% (30 vendors) have duplicate vendor names;
- 1% (28 vendors) have invalid postal codes;
- 0.6% (17 vendors) have duplicate Post Office Box numbers and different vendor name.

Risk Implication

Errors can occur when the data is not accurate. There is an increased risk of fraud such as employees creating a vendor and doing business with the company. Conflicts of interest may not be properly monitored. Payments may be made incorrectly and to the wrong vendor. Vendors with incomplete fields can lead to inaccurate and/or incomplete payments.

Recommendations

Review the exceptions noted and remove duplicate vendors in the vendor master file and complete fields that are missing. Procedures should be implemented to improve data quality at point of original data entry when a new vendor is created. This will help the control environment by ensuring that duplicate and incomplete data is detected and corrected

Management Response	Owner (Date)
A large percentage of the vendor master records identified in the audit were carried over from EnWin's legacy system into SAP upon the go-live conversion in 2010. A process improvement will be implemented to review the data annually, at a minimum, and flag inactive vendor master data for deletion.	

7. Vendor Assessments Not Performed	
Criteria	• Effectiveness of service delivery is measured by conducting a post project review • An active vendor management process exists so that the vendor performance is continually monitored.

☐ Major – Action
☐ Moderate - Attention
☐ Minor- Consider
☑ Improvement Opp.

Observation:

Vendors perform a critical service for EnWin. It is important that their performance is monitored and assessed on a regular basis. Assessments of vendors do not occur. Since a substantial portion of EnWin's business is carried out by vendors, especially the outside construction work, it is important to have a positive collaborative long term relationship with vendors.

Performing vendor assessments helps to deal with any issues that may arise during the course of the relationship and also helps to build trust between the two parties.

EnWin should develop policies that deal with vendor assessments and create a vendor management process that will help EnWin achieve its objectives.

Risk Implication

May continue to use vendors who have not provided appropriate service in the past. Also, by not monitoring vendors becomes more difficult to change behaviour if objectives are not being met. Strategic initiatives may not be achieved without having a good relationship with vendors.

Recommendation

A vendor assessment process should be developed and followed. This process should be documented in EnWin's policies. An important part of vendor management is a rigorous vendor assessment process to ensure that work is conducted in a timely manner and meets EnWin's quality standards.

Management Response	Owner (Date)
Vendor evaluation and ongoing vendor development is a priority which was previously identified by EnWin prior to this audit. Development and establishment of a vendor evaluation system has been instituted as a department goal and objective for 2014.	

Objective:

1) To identify any potential matches of name or addresses between the Vendor Master and the Employee Master File for all vendors not listed as employee type "6"
2) To verify that all vendors listed as type "6" (Employees) exist in the employee master file with an active status
3) To identify potential duplicate key fields (number, mailing address) and name within the Vendor Master File
4) To identify vendors with incomplete or invalid key fields (phone number, address, postal code) in the vendor master file.

From our analyses, we noticed 2 key themes in our observations:

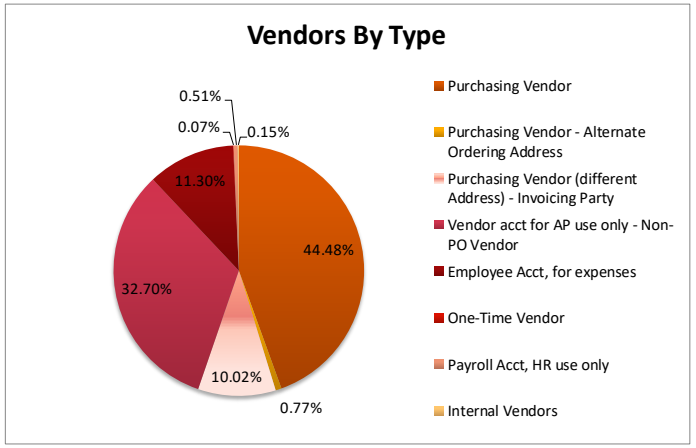
1) Data Quality

- There are a number of Potential duplicates in the vendor master file
-There are vendors with incomplete key fields in the vendor master file.

2) Processes and Controls

- There may not be sufficient / appropriate controls in place to detect and prevent duplicate data or incomplete data.
- Potentially, there may be certain individuals not following through with the defined process when creating a vendor.

VM Analysis - Vendor Types

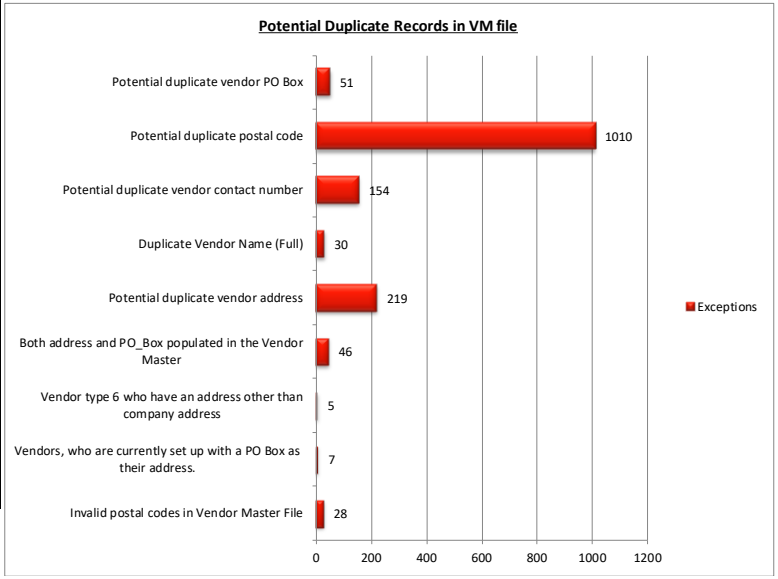


Vendors by Type				
Vendor Type	Description	% of total	Vendors	Inactive
1	Purchasing Vendor	44%	1,216	22
2	Purchasing Vendor - Alternate Ordering Address	1%	21	-
3	Purchasing Vendor (different Address) - Invoici	10%	274	-
4	Vendor acct for AP use only - Non-PO Vendor	33%	894	-
6	Employee Acct, for expenses	11%	309	-
7	One-Time Vendor	0%	2	-
9	Payroll Acct, HR use only	1%	14	-
I	Internal Vendors	0%	4	-
	Total		**2,734**	

Key Observations
- The 2 key vendor types are 1 (purchasing vendor) and 4 (purchasing vendor for AP use only), making up close to 77% of all vendors

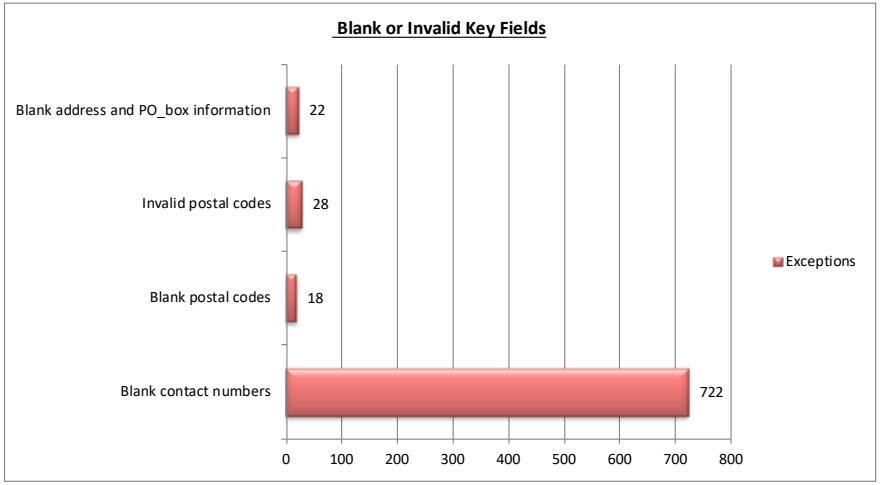
***Vendor Type is determined from the first character of vendor number*
*** inactive vendor defined by any vendor that does not have a confirmation date*

VM Analysis - Potential Duplicates in VM file



Potential Duplicate Records in VM file			
Test	Description	Exceptions	% of total
VM10	Invalid postal codes in Vendor Master File	28	1%
VM09	Vendors, who are currently set up with a PO Box as their address.	7	0%
VM08	Vendor type 6 who have an address other than company address	5	0%
VM06	Both address and PO_Box populated in the Vendor Master	46	2%
VM05	Potential duplicate vendor address	219	8%
VM01	Duplicate Vendor Name (Full)	30	1%
VM2A	Potential duplicate vendor contact number	154	6%
VM3A	Potential duplicate postal code	1010	37%
VM04	Potential duplicate vendor PO Box	51	2%

Key Obervations
There are a number of vendors who are potential duplicates. Within these duplicates: -Several postal codes are not correctly tied with the address. Of the 1010 (22%) duplicate postal codes noted, many of them have different addresses. -Similarily, of the 219 (14%) duplicate vendor addresses noted, there are 31 instances where the address is duplicating, but the postal code is different

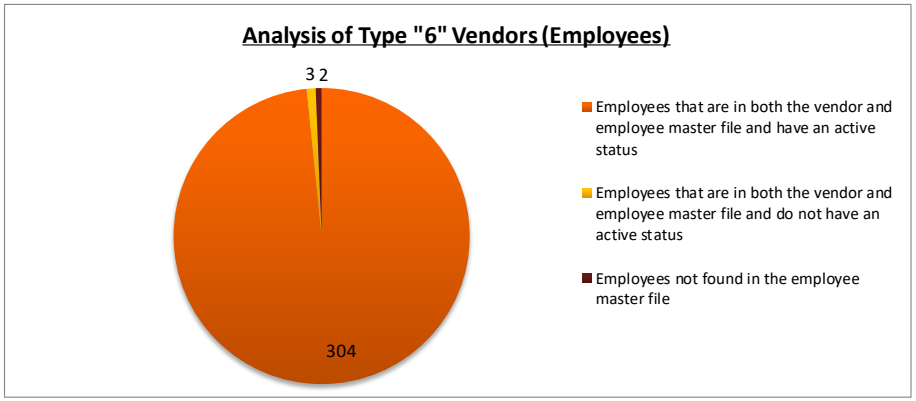


Vendors with Blank or Invalid Key Fields in VM file			
Test	Description	Exceptions	% of vendors
VM2B	Blank contact numbers	722	26%
VM3B	Blank postal codes	18	1%
VM10	Invalid postal codes	28	1%
VM07	Blank address and PO_box information	22	1%

Key Observations

-There are numerous blank or invalid key fields throughout the file, noted in the chart above.
-These fields are critical to vendor master management and for the payment process.
- Client contact field is not a key field. It would be good to have it populated, as it is helpful by providing additonal client information.

VM to VE Analysis - Analysis of Type "6" Vendors (Employees)



Analysis of Vendor type "6"		
Description	Vendors	%
Employees that are in both the vendor and employee master file and have an active status	304	98%
Employees that are in both the vendor and employee master file and do not have an active status	3	1%
Employees not found in the employee master file	2	1%
Total	309	100%

Key Observations

- Very few type 6 employees who are not found in the Employee file.

VM to VE Analysis - Potential Matches (Same address or Name) between VM and VE

Comparison between the VM and VE file		
Test	Description	Exceptions
VE1	Comparison between employee name from VE File with vendor name from VM File	18
VE3	Comparison between employee address from VE File with vendor address from VM File	2

**Does not include type "6" (Employees) vendors*

Key Observations

Of the 18 instances where the employee name is the same as that in the vendor master file, 5 are definite matches
Of these 5 definite matches, 3 of them have either an inactive or withdrawn status in the employee file

Appendix B

Factors to Consider in Developing Sole Source/Single Source Procurement Policy

Sole Source

- In order to obtain approval for a sole source purchase, the Business Unit should complete a Justification report for the Procurement Dept. The Justification Report should be approved in accordance with the Signing Policies.

- Upon receiving a completed Justification Report, the Procurement Department should conduct a due diligence review of the sole source purchase request to confirm that either:

(i) only one vendor is uniquely capable of providing the goods and/or services required and no other vendor can provide such goods and/or services; or

(ii) an unforeseeable situation of urgency or emergency exists and the goods and/or services or construction cannot be obtained by means of a competitive process as required by the Procurement Policy.

- Upon receiving a completed Justification Report, the Procurement Department in consultation with Legal Dept will conduct a due diligence review of the extension request to determine if the current contract permits such an extension and whether such extension is in the best interests of EnWin, including a review of the proposed contract's specifications, scope, commercial terms, liabilities, and insurance requirements.

Single Sourcing

- If the business unit wishes to maintain a single sourcing list in respect of certain specified goods and/or services (not including construction contracts), where the estimated annual value of the Procurement does not exceed (i)$xxx in the case of a Procurement of goods only, or (ii) $xxx in the case of a Procurement of services only or a combination of goods and services. The Manager should determine that the nature of such goods and/or services is such that the competitive procedures would not be suitable for the Procurement in question. The following are suggested:

The Business Unit and the Department shall work together to compile a list of vendors for the purchase of the specified goods and/or services through completion and evaluation of vendor application and by conducting a due diligence examination of the marketplace. The vendor list shall describe the goods and/or services for which it is intended to be used and may not be used for any other goods and/or services. Once a vendor list is established, the Manager approves the single source vendor list in writing by completing a copy of the vendor list. (ii)The single source vendor list should be updated annually through a new application and evaluation process as described above. Upon receiving a completed single source Vendor Purchase Request the Procurement Department should confirm that the vendor is a current vendor on the single source vendor list for the applicable goods and/or services and that the goods and/or services procured align with the goods and/or services for which the single source was approved. (ii) The review should also determine if the single source purchase is in the best interests of EnWin and include a review of the proposed contract's specifications, scope, definition, commercial terms, liabilities, and insurance requirements.

AGENDA SUBMISSION

To: EWU Board of Directors

July 26, 2016

From: Victoria Zuber

Re: PWC Internal Audit Report

As part of Windsor City Council's approved revised 2015/16 Internal Audit Plan, PWC performed a Performance-Based audit involving areas of asset management at Enwin Utilities, and the associated processes and controls involved in those areas.

Enclosed is their final report which includes management's comments.

It is important to note that PwC has indicated that none of the findings are regarded as significant and that if implemented, the recommendations will provide greater efficiency and better leveraging of our work management systems rather than address any major control deficiencies. Overall management is in agreement with the findings and for the most part was already aware of the noted issues. Current funding and limited resources have resulted in a focus on the higher risk areas and ensuring they are adequately addressed. The audit report clearly indicates that management has done a good job in those areas.

SAP is our Enterprise Resource Planning ("ERP") system. It went live in 2010. We have since installed a new Customer Information System ("CIS") in 2014, and have just completed the installation of our Outage Management System ("OMS"). We embarked on a five year strategy to implement mobile field devices in 2013. Many of the recommendations in this report are recommendations to optimize our use of our systems. We will be evaluating those from a cost/benefit perspective as well as prioritizing any recommended enhancements.

Recommendation

That the PWC Internal Audit Report be received.

Vice President, Finance and CFO

President and CEO

www.pwc.com

The Corporation of the City of Windsor

Enwin Utilities Ltd

Final Internal Audit Report

9 August 2016

Distribution List

For action
Helga Reidel – Chief Executive Officer
Victoria Zuber –Chief Financial Officer
John Wladarski – Vice-President Asset Management
John Stuart – Vice-President Operations
Jim Brown – Director of Hydro Infrastructure
Grant Pennington – Director Hydro Operations

For information
Onorio Colucci, Chief Administrative Officer
Stephen Cipkar, Executive Initiatives Coordinator

Limitations & Responsibilities

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pwc

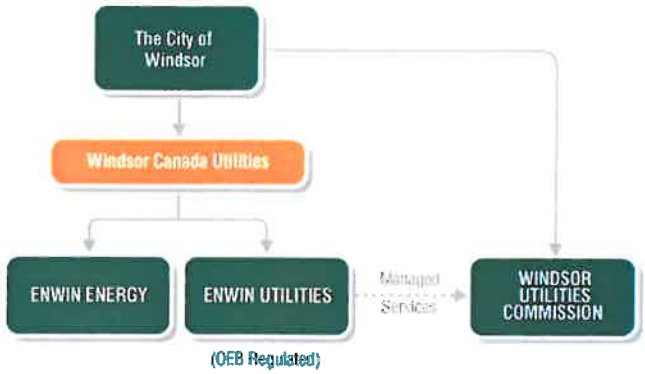
Contents

Summary of Internal Audit Results

Background Information

The City of Windsor is the sole shareholder of Windsor Canada Utilities, Ltd ("WCU"), a holding company which owns both Enwin Energy Ltd. ("Enwin Energy"), as well as Enwin Utilities Ltd. ("Enwin Utilities"). Windsor Utilities Commission ("WUC") is a local board of the Corporation of the City of Windsor, which receives managed services from Enwin Utilities (all three collectively, "Enwin").

The chart below describes the operating structure as of March 29, 2016.



WCU provides strategic direction and financing to the operations of Enwin Utilities as well as Enwin Energy.

Enwin Utilities is Windsor's Local Distribution Company, responsible for the distribution of electricity and the servicing and maintenance of Windsor's power line infrastructure. Enwin Utilities provides services to WUC with respect to the operating the water treatment and distribution system as well as District Energy. The services include: management, administrative services, construction operations, and maintenance services. The Corporation is responsible for providing all personnel required to operate the water system and District Energy. Enwin Utilities provides billing, credit, financial, and customer service on behalf of the City of Windsor in relation to waste water. Enwin Utilities also provides billing, credit, financial, customer service and other support services on behalf of Enwin Energy in relation to sentinel lighting and street light maintenance. Enwin Utilities' arrangements with these affiliates are subject to the Ontario Energy Board's Affiliate Relationships Code (the "ARC"), which is a code prescribed by and issued pursuant to the Ontario Energy Board Act, 1998.

Enwin Utilities has appointed multiple elected City officials on their Board of Directors, including the Mayor as well as independent Directors.

As WCU is wholly owned by the City of Windsor, they are accounted for on a modified equity basis, consistent with the generally accepted accounting treatment for a Government Business Enterprise ("GBE"). Under the modified equity basis, the business enterprise's accounting principles are not adjusted to conform to those of the City, and inter-organizational transactions and balances are not eliminated. On an annual basis, Windsor Canada Utilities may declare a dividend to its shareholder based on the results of the most recent fiscal year. Major transactions include the collection and remittance to the City of sewer surcharge billings.

The engagement has been performed in accordance with the scope of work per Appendix A.

Report Classification

In general, controls are properly designed and are operating effectively for the purpose envisaged. Overall, Enwin Utilities has prioritized the assets in need of attention and have been following through on its plan to address these. Cost tracking is in place with a strong emphasis on meeting the established budget for the year and for the respective projects.

Internal Audit Classification

Given the nature of this internal audit project we are providing an overall assessment using our traditional internal controls model as well as performance auditing measures.

Internal Controls Assessment

While some design issues were identified, none were regarded as significant design deficiencies. If implemented, these recommendations would serve to provide for greater efficiencies and better leveraging of its system capabilities rather than addressing major control deficiencies. Enwin Utilities has been following its plan to maintain its assets and track the costs involved in this process.

Based on the controls identified and tested, we have determined that there is reasonable evidence to indicate that:

	No or limited scope improvement	No Major Concerns Noted	Cause for Concern	Cause for Considerable Concern
Controls over the process are designed in such a manner that there is:		✓		
Sample tests indicated that process controls were operating such that there is:	✓			

Management has provided comprehensive action plans, which we believe will address the deficiencies noted.

Performance-Based Audit Results

These results are based solely on Hydro Distribution work orders and accounts. The scope of our review considered the period of November 1, 2014 through October 31, 2015. In this period, we considered project estimates applied for individual projects subsequent to the approval of the Enwin Utilities budget. These project estimates are based on the original Enwin Utilities budget, as well as information that has been gathered about the project such as previously unknown conditions of the area of the work to be performed, foreign exchange fluctuations, or in the case of outsourced projects, the value of the agreed tender value.

Performance objective 1: Overall projects are delivered within dollar values, effort hours and materials within 10% (over or under).

Assessment: Performance measure of +/- 10% **is met**. Actual results had an overall unfavourable variance of 6.3% to internal operational estimates. Capital projects contributed significantly to this variance as opposed to ongoing operations and maintenance.

Projects associated with operations and maintenance **met** the performance objective having a favourable variance of 5.52% to internal operational estimates in the scope period, or$171,615.22.

Capital projects **met** the performance objective having an unfavourable variance of 9% to internal operating estimates in the scope period, or $1,108,269. However, upon review of the data provided from SAP, some estimated amounts were not recorded on the work order in the system. The most common causes noted were (1) as noted in Finding 10 below, the planned and estimated costs fields were not used consistently, resulting in work order estimated amounts not being entered in the system; and (2) capital projects included emergency work for which work order-level estimated costs are not estimated as repairing the assets are an immediate priority.

Performance objective 2: Individual projects are delivered within dollar values, effort hours and materials within 10% (over or under)

Assessment: On an annual basis, Enwin Utilities develops both a capital and operating budget. During our review, it was learned that capital projects are given an estimate at the project level, however this is not done for operating expenses. Rather, estimates are handled at a "general ledger" level, whereby the costs are classified based on the account types as opposed to by work order. Therefore, we are unable to assess this performance objective for operating expenses. However, as noted below, this assessment can still be carried out for capital projects.

Capital projects did **not meet** the performance objective given that 28% of the projects in the period met the performance variance expectation. There were 176 capital projects noted. The projects outside the performance measure targets were comprised of 2% had no estimated amount, 36% exceeded the threshold and 34% came in below the threshold. It was noted that savings from projects whose estimates were not fully spent are applied to those that exceeded estimates.

Performance objective 3: Projects that exceed 10% variance threshold (over or under) have a variance analysis performed.

Assessment: Performance measure of projects exceeding 10% variance threshold having a variance analysis performed **is not met.** Per review of 104 projects for which a variance analysis would be required, a variance analysis was performed in 25 situations. This result is further discussed in finding #1 below.

Performance objective 4: Preventable asset breakdowns represent less than or equal to 10% of all breakdowns.

Assessment: Performance measure of preventable asset breakdowns represent less than or equal to 10% of all breakdowns **is met.**

1,070 failures were noted in the year. 906 of these were either planned, uncontrollable by Enwin, or possibly preventable by Enwin representing 84.6%. While a further 129 did not have sufficient data to determine whether they were preventable or not, representing a further 12%.

Summary of Positive Themes

Greater than 50% of capital projects performed are done in-house with Enwin Utilities staff, allowing for a greater deal of flexibility in terms of allocating resources to different functions, as well as retaining the knowledge of performing these functions within the company.

When an asset failure occurs, following its correction, information involving the failure is recorded, including what asset had failed, the date of the failure, as well as the cause. This allows Enwin Utilities the ability to identify problem assets, as well as whether failures are caused by means that are beyond their control. This could lead to planned upgrades or repairs across the system for the asset type, or to provide the means to mitigate the risk of future breakdowns of similar assets.

An Asset Management Plan is in place which guides the next five years of asset repairs, maintenance and implementation. This is used in building logs of assets with a scoring mechanism to aid in determining how future work is prioritized.

Enwin Utilities has been focused on the capital side of the business and shown dedication in identifying its assets in need of repair or upgrade and carrying that out. With a focus on prioritizing these assets, Enwin Utilities has been able to deploy crews throughout the year in order to extend the useful life of its assets and provide continued service to its customers.

In terms of finding synergies and efficiencies between Enwin Utilities and WUC, there has been success in aligning processes and sharing of resources across the two business functions, specifically in relation to back office support, for example on work order generation, trouble calls, and work order close outs.

Summary of Findings

Finding #	Topic	Rating[1]			Management Action
		Significant	Moderate	Low	
1	**Requirement and Timing of Variance Reporting**			X	
2	**Kitting Process Delays**		X		
3	**Operations & Maintenance Performance Measures**		X		
4	**Failure Codes**		X		
5	**Duplication of Work Type Statuses**		X		
6	**Lack of Description in Work Order Details**		X		
7	**Operations &Maintenance Activities Scheduling Horizon**		X		
8	**Work Order Results Review**			X	
9	**Root Cause Analysis Methodology**		X		
10	**Incomplete Work Order Forms**			X	
Total Audit Findings		0	7	3	

Summary of Significant Findings

As noted above in the Summary of Audit Findings, Internal Audit did not classify any findings pertaining to Enwin Utilities as significant.

Management Comments

Name: Victoria Zuber
Title: Vice President of Finance and CFO
Date: April 25, 2016

It is important to note that PwC has indicated that none of the findings are regarded as significant and that if implemented, the recommendations will provide greater efficiency and better leveraging of our work management systems rather than address any major control deficiencies. Overall management is in agreement with the findings and for the most part was already aware of the noted issues. Current funding and limited resources have resulted in a focus on the higher risk areas and ensuring they are adequately addressed. The audit report clearly indicates that management has done a good job in those areas.

Detailed Observations

Finding	Rating[1]	Recommendation & Action Plan
1. Requirement and Timing of Operational Variance Reporting		
Observation For all capital projects, it is the practice of Enwin Utilities to create a variance report for internal/operational purposes when the final spend varies from internal operational estimates by 10% (favourable or unfavourable, thus creating a 20% threshold). While it was observed that this is generally occurring at Enwin Utilities, it was noted that a formal procedure is not in place to govern when these would be required. In a sample of ten capital projects, it was noted that in one instance, a variance report was not prepared despite being outside the 10% threshold from the estimated cost (the common threshold used).	**Overall** Low **Impact** Low **Likelihood** Likely	**Recommendation** Management should draft a procedure document that clearly defines what circumstances would require the creation of an internal/operational variance report and stipulates clearly the intended outcomes and focus areas for that document. This policy then should be introduced to all relevant stakeholders within the organization. The focus of variance reports should be to identify opportunities to lessen the risk of significant variances. The financial performance of projects should be reviewed by an appropriate level of management to determine whether the policy is being complied with. **Management Action Plan** Management agrees with the finding. Our internal checklist will be updated to include the requirement to create a variance report if the threshold exceeds 10%. Periodic internal reviews will be held to ensure compliance. Enwin will document a standardized formal process for completing internal variance reports for all capital project work for all companies. Periodic internal compliance will be monitored by Engineering and Finance. **Responsibility** Director Hydro Engineering **Due Date** July 2016
Implication Operational variance reporting may not occur in a timely manner to enable prompt learns and loss avoidance or optimization.		
Root Cause Timeliness and compliance requirement not formally defined and implemented.		

[1] See Appendix B for Basis of Finding Rating and Report Classification

Finding	Rating[2]	Recommendation & Action Plan
2. Kitting Process Delays		
Observation At the beginning of each work day, work crews meet in the garage of the Operations Center to review their daily assignments, as well as pick up whatever tools and equipment that will be necessary, or their "kits". It was noted that in the case of some capital projects, kits were prepared and contained in a locked container for crews to pick up. However, it was noted that the kitting for many O&M projects were not ready at the beginning of the work day, and were picked up later in the work day, causing delays in crews heading to their job sites, delaying their ability to be productive during their shift.	**Overall** Moderate **Impact** Medium **Likelihood** Likely	**Recommendation** In conjunction with the recommendation in observation #7, schedules should be provided to those responsible for preparing kits in advance to reserve the appropriate tools for when they are needed using a "hard reserve" system where they cannot be checked out by others until it is used by the intended crew. Thus, these will be prepared days ahead of the planned work, reducing idle time for crews. Further benefits will be derived from the ability to better predict the demand for parts and equipment, allowing a greater lead time for ordering further supplies from vendors. **Management Action Plan** Management agrees with the finding. Cost/benefit analysis will be completed and analyzed to determine next steps. **Responsibility** Director Hydro Operations **Due Date** October 2016
Implication This limits the visibility in the system in terms of what parts are available, even if they are sitting in a container and may not be used for a long period of time, potentially resulting in an inefficient use of resources and dollars. Furthermore, as kits are not prepared at the start of the day, it results in idle time for crews as they await the preparation of their kits.		
Root Cause The scheduling horizon for crews is only one week, and kits are not prepared for crews on a timely basis.		

[2] See Appendix B for Basis of Finding Rating and Report Classification

Finding	Rating[3]	Recommendation & Action Plan
3. Operations & Maintenance Performance Measures		
Observation A report titled Organizational Compliance, which identifies overall compliance to on-time work order delivery, work order count and Labmat % variance was noted, which provides real-time KPIs. However, this report provides a view of grand totals and does not provide work order detail. It only shows a percentage relative to the overall total and does not provide a capability of a drill down function to find the detail. This report does not take into account the costs per labour and material separately and does not provide information if the issues are related to planned material vs. actual nor planned labour vs. actual. The information does not provide the details on where improvements are needed to adjust estimates per work order.	**Overall** Moderate **Impact** Medium **Likelihood** Likely	**Recommendation** Management should consider determining the key performance indicators based on strategic and short-term targets, for which they could be provided with real-time progress. The SAP data structure could then be revised to provide reports capable of these figures at a more detailed level to provide further diagnostic information in determining the root cause of poor performing KPI, as well as what is leading to the strong performance of high-scoring KPI. **Management Action Plan** Management agrees with the finding. The current report used by the Hydro Supervisors, is generated to evaluate volume of work orders closed at a high level. The report achieves this intended outcome. Management will review cost/benefit analysis of including additional detailed information to determine next steps. **Responsibility** Director Hydro Operations Director Information Technology **Due Date** October 2016
Implication The way data is structured to capture costs only at higher levels makes it challenging and labour intensive to gain a granular view on the issues.		
Root Cause System capabilities are not used to their full potential. Currently, data structure is focused on the project level for capital projects and the cost centers level for Operations & Maintenance, rather than the detailed work order level.		

[3] See Appendix B for Basis of Finding Rating and Report Classification

Finding	Rating[4]	Recommendation & Action Plan
4. Failure Codes		
Observation The outage report from the hydro side focuses on the requirements of reporting outages to the Ontario Energy Board (OEB). This report fulfils OEB requirements, but can be used further to assist in understanding the reasons why outages occur and what can be done to prevent those types of outages in the future.	**Overall** Low **Impact** Low **Likelihood** Likely	**Recommendation** Failure codes should be applied to work orders within SAP to allow for a greater level of analysis in understanding the cause for failures, as well as what can be done to lessen the risk of recurrence with other assets. **Management Action Plan** Management agrees with the finding. Outages are documented, categorized and in compliance with OEB requirements. Equipment failures represent approx. 20% of outages. Further cost/benefit analysis will be completed to determine next steps. **Responsibility** Director Hydro Infrastructure **Due Date** October 2016
Implication By focusing only on reporting outages to the OEB in order to fulfil compliance requirements, Enwin loses out on the possibility of learning new information to improve its practices to either better handle future failures or identify means to lessen the likelihood of recurrence.		
Root Cause Structured approach for collection and utilization of data are limited in regards to improving work management processes.		

[4] See Appendix B for Basis of Finding Rating and Report Classification

Finding	Rating[5]	Recommendation & Action Plan
5. Duplication of Work Types		
Observation As a result of receiving back office support from Enwin Utilities, WUC uses SAP for its day-to-day and reporting functions. Work order types are duplicated in SAP to separate Enwin Utilities and WUC from a cost allocation perspective, with costs being allocated to cost centres or project codes, rather than assets or work orders. As a result, Internal Audit was required to manually compile data as a part of its analysis as this information could not be readily prepared.	**Overall** Moderate **Impact** Medium **Likelihood** Likely	**Recommendation** Data structures should be reconsidered in addition to being set to the cost center, they also assign cost to work orders and/or assets. By doing so, it will be simpler to review the project's performance against its estimate at the work order and asset level. This will also enable Enwin to create reports which focus on KPI and dashboards that drive the overall business toward their strategic goals. This will enable Enwin to enjoy benefits related to automated reporting, allocating costs to individual assets, and to perform deeper analysis into asset classes to aid in decision making **Management Action Plan** Management agrees with the finding. Cost/benefit analysis will be completed and analyzed to determine next steps. **Responsibility** Director Information Technology **Due Date** October 2016
Implication The current data structure limits the potential reporting of detailed actual vs budget/estimated costs, preventing a system analysis of these figures at the asset or work order level, creating a challenge to determine the effort and true cost involved at these levels.		
Root Cause Implementation data structure definitions possibly lacked detail on how operations should use the data and information derived from the data, for example to compare actual and planned costs		

[5] See Appendix B for Basis of Finding Rating and Report Classification

Finding	Rating[6]	Recommendation & Action Plan
6. Lack of Description in Work Order Details		
Observation While gaining an understanding of the work orders process, it was noted that the work orders provided a limited amount of detail. While general requirements are provided, the observed work orders do not provide details concerning specific parts required in a job, as well as detailed work steps, resulting in depending on Enwin staff having the experience to carry the work out. It was further noted that a variance analysis is not performed for O&M work orders as cost estimates are not provided at a work order level. Rather, these costs are considered at a GL-level.	**Overall** Moderate **Impact** Medium	**Recommendation** Management should consider: a. providing training to communicate the need for a greater level of detail in regards to the work order description, including the required parts, as well as detailed steps needed to complete the task. b. creating a task force consisting of its more experienced staff members in drafting standard steps for routine work orders. c. updating its policies regarding work orders to require this level of detail to be provided. d. Management should consider adding estimated costs at a work order level in order to provide a means to carry out a variance analysis for work orders, whether it be for all work orders, or those of a certain size or importance.
Implication By not providing these details in work orders, it increases the probability of inconsistent processes being carried out for similar work, thus preventing the most effective, efficient and economical approach from being carried out. Furthermore, as the current workforce begins to retire, Enwin is at risk of knowledge loss and may not be able to call on past experience with the work being carried out. By not tracking variance analysis at an individual work order level, this could prevent an opportunity to learn causes for the variance at a micro level which could be applied to other work orders in a more rapid manner, allowing for earlier efficiency gains.	**Likelihood** Likely	**Management Action Plan** Management agrees with the finding. Cost/benefit analysis will be completed and analyzed to determine next steps. Currently moving to more detailed planning within SAP which allows for step by step instructions to be provided on the work order. Standard operating procedure documents currently provide the necessary details to complete the work required. **Responsibility** Director Hydro Engineering Director Hydro Infrastructure **Due Date** October 2016
Root Cause To date, the training provided around this function has not considered the need to provide more detailed work instructions.		

[6] See Appendix B for Basis of Finding Rating and Report Classification

Finding	Rating[7]	Recommendation & Action Plan
7. O&M Activities Scheduling Horizon		
Observation Operation & Maintenance activities are planned one week at a time, providing a list of scheduled activities to the crews. While the plan needs to be adjusted due to unforeseen and unpredictable equipment failures, as many O&M projects are less than one week in length, one week of scheduling creates constraints in terms of scheduling their staff and ensuring they have appropriate supplies on hand when they are needed.	**Overall** Moderate **Impact** Medium **Likelihood** Likely	**Recommendation** Management should consider implementing the SAP system components needed to gain visibility into workforce availability by craft and plan work to the level of detail of hours by craft needed to consider a longer scheduling horizon. Management should focus on having the same crews focus on similar projects in near geographic proximities to allow for more efficient and economical project completion. By doing so, management could provide a 3 month projected work load for its crews, with a one-week commitment plan. **Management Action Plan** Management agrees with the finding. Cost/benefit analysis will be completed and analyzed to determine next steps. **Responsibility** Director Hydro Operations Director Hydro Infrastructure **Due Date** October 2016
Implication By using such a short horizon, Enwin is less capable to realize potential efficiency gains and would be less capable to provide projects with the right staff at the right time.		
Root Cause The current system visibility into available workforce does not consider activities beyond the current week. A further limitation is caused by the visibility into work order loading by craft from the backlog.		

[7] See Appendix B for Basis of Finding Rating and Report Classification

Finding	Rating[8]	Recommendation & Action Plan
8. Work Order Results Review		
Observation Upon closing a work order, there was little evidence of reporting back on what specifically was done, how it was done, why it was done and that information being used to improve upon the work in the future, i.e. for time based repetitive work orders.	**Overall** Low **Impact** Low **Likelihood** Likely	**Recommendation** Following the closure of a work order, a report should be completed within SAP which outlines the work performed, the cause for the work to be carried out, and what can be done in the future to improve on the process to allow Enwin to realize potential efficiencies. These efficiencies should be considered to update standard procedures provided in work order details in conjunction with observation #6. **Management Action Plan** Management agrees with the finding. Costs are typically reviewed compared to budget. For capital work orders, opportunities for improvements will be emphasized in the standardized cost variance procedure (finding #1). Cost/benefit analysis will be completed and analyzed to determine next steps. **Responsibility** Director Hydro Operations **Due Date** October 2016
Implication When information is not reviewed from the execution of time based maintenance activities, there are lost opportunities to develop more efficient and effective practices when similar work is later planned, preventing the knowledge from being shared with the organization.		
Root Cause Failure codes and improvement processes from failure and reporting are not in place.		

[8] See Appendix B for Basis of Finding Rating and Report Classification

Finding	Rating[9]	Recommendation & Action Plan
9. Root Cause Analysis Methodology		
Observation PwC noted that Corrective Preventive Action Forms are in effect to analyze circumstances of significant outages at Enwin Utilities. While some exploration into actual root causes is carried out, a formalized methodology is not in place. Samples of Corrective Preventive Action Forms were reviewed and hydro does analyse circumstances of significant outages on the hydro side. They do suggest root causes of failures but do not seem to follow a root cause methodology, for example: a "5 Why" method, a Fishbone method, TapRoot method, Apollo method or other similar methodologies.	**Overall** Moderate **Impact** Medium **Likelihood** Likely	**Recommendation** Management should review various root cause analysis methodologies, such as the "5 Why" method, the Fishbone method, TapRoot, or Apollo method, as examples. Upon deciding which is most appropriate for its business needs, this should be implemented followed by training to appropriate staff members to provide a consistent means to identify potential improvements. **Management Action Plan** Management agrees with the finding. Management will review various root cause analysis methodologies and will select one to be used throughout the organization. Procedures will be updated and training provided. **Responsibility** Director Hydro Operations **Due Date** September 2016
Implication Without an approved methodology to uncover the root cause of asset failures, inconsistent approaches may be used, which could ignore industry practice or more current techniques. This in turn could lead to inappropriate or incomplete root cause conclusions, preventing Enwin from fully learning from past mistakes.		
Root Cause Root cause analysis methodologies have not been reviewed and taught to staff.		

[9] See Appendix B for Basis of Finding Rating and Report Classification

Finding	Rating[10]	Recommendation & Action Plan
10. Incomplete Work Order Forms		
Observation During the data analysis of capital project work orders, it was noted that in some cases, the Planned Cost (original budget amount) and Estimated Cost (and revised engineering estimate) fields are used inconsistently in SAP. While these costs are always determined ahead of the execution of work, they are not always stored in a consistent field in SAP.	**Overall** Low **Impact** Low **Likelihood** Likely	**Recommendation** Further training should be provided to stakeholders and work order preparers in regards to the recording of the various Estimated and Planned cost element fields within SAP. A further emphasis should be provided on explaining the importance of recording these values. Upon the creation of any work orders, it should be required that these fields be populated prior to approval. **Management Action Plan** Management agrees with the finding. Management will prepare training for appropriate staff to ensure the proper use of planned/estimated costs for all capital projects. Management will review the cost/benefit of utilizing the Investment Module within SAP in conjunction with corporate priorities and projects. **Responsibility** Director Information Technology **Due Date** September 2016
Implication Standard reporting will not always be correct as standard reports pull from specific fields. This will make the comparison of Planned vs. Actual costs incorrect in some cases and perhaps even generate a variance report without true cause.		
Root Cause Planned and estimate costs have not always been allocated to the right fields in SAP.		

[10] See Appendix B for Basis of Finding Rating and Report Classification

Considerations for Improvement

There was one additional considerations for improvement noted as follows:

1. Mobile tablet usage for work execution support.

Mobile tablets are used in a limited way to gather information in the field. These tablets have the potential to lessen the amount of paperwork involved and provide field employees with direct access to various information related to their work. These tablets can also enable data collection for reporting of work, allocation of hours related to the work, selecting the failure codes, getting geographical information, and more.
It is highly recommended that Enwin continue with the wider implementation of these mobile tablets as they can increase efficiency and quality of information to the work in the field as well as the reporting of work and data collection.

Appendix A: Background & Scope

Linkage to the internal audit plan

As part of the Council approved revised 2015/16 Internal Audit Plan, Internal Audit performed a Performance-Based audit involving areas of asset management at Enwin Utilities, and the associated processes and controls involved in those areas.

Scope

Overview of the business/process to be reviewed

As part of internal audit of the business processes and controls in effect for managing infrastructure, Internal Audit considered:

1. Work Planning
2. Work Scheduling and Assigning
3. Work Execution and Close Out
4. Unplanned Work
5. Work Management Performance Measures

Key work management processes that were considered as part of this engagement include:

- Work Planning
  - Identifying and specifying work to be performed;
  - Work prioritization and approval; and
  - Identifying resources required and arranging for resources to be available.
- Work Scheduling and Assigning
  - Schedule funnel, and application of priorities and other criteria used in scheduling; and
  - Work assignment.
- Work Execution and Close Out
  - Feedback provided for analysis and performance improvement.
- Unplanned Work
  - Emergency and other unplanned work performed.
- Work Management Performance Measures
  - Measures used and what decisions do they drive.

As part of this engagement, two conclusions were formed. The first pertains to the attainment of the objectives set out in the Scope Memo dated November 11, 2015. Also provided are risk & control conclusions involving the design and operating effectiveness of controls surrounding the objectives set out.

Our scope period covered November 1, 2014 – October 31, 2015.

Specific Scope Considerations

While our engagement involved the analysis of financial information and accounting records, it does not constitute an audit or an audit related service in accordance with Canadian generally accepted accounting standards, and accordingly no such assurance is provided in our report.

Consistent with commonly accepted practices, our work was dependent on the following management activities which were excluded from the scope of this review:

1. The effective design, implementation and operation of the Information and Technology (IT) environment and IT general controls.
2. The effective design, implementation and operation of business system and application controls related to the capture, processing, storage, reporting/presentation and exporting of information and data.
3. Controls over the completeness, accuracy, reliability and validity of the evidence, information and data provided by management during the course of this review.

Appendix B: Basis of Finding Rating and Report Classification

Findings Rating Matrix

Audit Findings Rating		Impact		
		Low	Medium	High
Likelihood	Highly Likely	Moderate	Significant	Significant
	Likely	Low	Moderate	Significant
	Unlikely	Low	Low	Moderate

Likelihood Consideration

Rating	Description
Highly Likely	• History of regular occurrence of the event. • The event is expected to occur in most circumstances.
Likely	• History of occasional occurrence of the event. • The event could occur at some time.
Unlikely	• History of no or seldom occurrence of the event. • The event may occur only in exceptional circumstances.

Impact Consideration

Rating	Basis	Description
HIGH	Dollar Value[11]	Financial impact likely to exceed $250,000 in terms of direct loss or opportunity cost.
	Judgemental Assessment	**Internal Control** Significant control weaknesses, which would lead to financial or fraud loss. **An issue that requires a significant amount of senior management/Board effort to manage such as:** • Failure to meet key strategic objectives/major impact on strategy and objectives. • Loss of ability to sustain ongoing operations: - Loss of key competitive advantage / opportunity - Loss of supply of key process inputs • A major reputational sensitivity e.g., Market share, earnings per share, credibility with stakeholders and brand name/reputation building. **Legal / Regulatory** Large scale action, major breach of legislation with very significant financial or reputational consequences.
MEDIUM	Dollar Value	Financial impact likely to be between $75,000 to $250,000 in terms of direct loss or opportunity cost.
	Judgemental Assessment	**Internal Control** Control weaknesses, which could result in potential loss resulting from inefficiencies, wastage, and cumbersome workflow procedures. **An issue that requires some amount of senior management/Board effort to manage such as:** • No material or moderate impact on strategy and objectives. • Disruption to normal operation with a limited effect on achievement of corporate strategy and objectives • Moderate reputational sensitivity. **Legal / Regulatory** Regulatory breach with material financial consequences including fines.
LOW	Dollar Value	Financial impact likely to be less than $75,000 in terms of direct loss or opportunity cost.
	Judgemental Assessment	**Internal Control** Control weaknesses, which could result in potential insignificant loss resulting from workflow and operational inefficiencies. **An issue that requires no or minimal amount of senior management/Board effort to manage such as:** • Minimal impact on strategy • Disruption to normal operations with no effect on achievement of corporate strategy and objectives • Minimal reputational sensitivity. **Legal / Regulatory** Regulatory breach with minimal consequences.

[11] Dollar value amounts are agreed with the client prior to execution of fieldwork.

Audit Report Classification

Report Classification	The internal audit identified one or more of the following:
Cause for considerable concern	• Significant control design improvements identified to ensure that risk of material loss is minimized and functional objectives are met. • An unacceptable number of controls (including a selection of both significant and minor) identified as not operating for which sufficient mitigating back-up controls could not be identified. • Material losses have occurred as a result of control environment deficiencies. • Instances of fraud or significant contravention of corporate policy detected. • No action taken on previous significant audit findings to resolve the item on a timely basis.
Cause for concern	• Control design improvements identified to ensure that risk of material loss is minimized and functional objectives are met. • A number of significant controls identified as not operating for which sufficient mitigating back-up controls could not be identified. • Losses have occurred as a result of control environment deficiencies. • Little action taken on previous significant audit findings to resolve the item on a timely basis.
No major concerns noted	• Control design improvements identified, however, the risk of loss is immaterial. • Isolated or "one-off" significant controls identified as not operating for which sufficient mitigating back-up controls could not be identified. • Numerous instances of minor controls not operating for which sufficient mitigating back-up controls could not be identified. • Some previous significant audit action items have not been resolved on a timely basis.
No or limited scope for improvement	• No control design improvements identified. • Only minor instances of controls identified as not operating which have mitigating back-up controls, or the risk of loss is immaterial. • All previous significant audit action items have been closed.

Appendix C: Outage Analysis

Outage report analysis – Enwin Utilities

The outage report was reviewed and analysed with a focus on if outages could have been prevented with predictive measures, such as monitoring of loading trends, thermal analysis, etc.

It should be noted that predictive measures, even if identified below, are not a guarantee for preventing failures. For that to occur, the predictive measures need to be applied in the right way at the right time. For example if a thermal analysis is made once per year and the failure develops over a shorter time period than a year, it might go undetected.

Below are two tables. The first table shows the count of outages in the scope period at Enwin. It is classified below on the vertical axis by what, if anything, could be done to prevent the outage. The horizontal axis classifies if it is possibly preventable, or not, etc. The second table shows the hours of outages from the same perspective as the first table.

Count of Type	Inconclusive	Bypass feed	Not known	Locate	Load trend	Inspection	Un-preventable	N / A	Thermal	Training	Grand Total
Not known	73	2	31		15	5	3				129
Planned								371			371
Preventable						35					35
Possibly Preventable	228	4		1	4	4	81		30	7	359
Uncontrollable by Enwin	15					2	159				176
Grand Total #	**316**	**6**	**31**	**1**	**19**	**46**	**243**	**371**	**30**	7	**1070**
Grand Total %	30%	1%	3%	0%	2%	4%	23%	35%	3%	1%	100%

Customer hours lost	Inconclusive	Bypass feed	Not known	Locate	Load trend	Inspection	Un-preventable	N / A	Thermal	Training	Grand Total
Not known	1,613.1	92.9	-		499.8	44.1	-				2,249.9
Planned								22,484.3			22,484.3
Preventable						5,601.8					5,601.7
Possibly Preventable	16,668.1	104.0		1.4	25.6	787.5	14,271.7		525.6	3,290.8	35,674.7
Uncontrollable by Enwin	476.87					88.2	14,905.5		119.0		15,589.6
Grand Total hrs	**18,758.1**	**196.9**	**-**	**1.4**	**525.4**	**6,521.4**	**29,177.2**	**22,484.3**	**644.6**	**3,290.8**	**81,600.3**
Grand Total %	23%	0%	0%	0%	1%	8%	36%	28%	1%	4%	100%

From the analysis above, looking at customer hours lost, the un-preventable category is the highest. The second category are the planned outages. The third, at 23%, was inconclusive from the description if it was preventable or not, this is primarily because the descriptions did not focus on the "why". The "why" of outages are very important from a continual improvement perspective to understand what can be implemented to prevent another outage of that type.

The conclusion of this analysis suggests that implementing a failure code definition as well as a structured root cause analysis approach, for example the "5 Why's", would help Enwin to improve in this area.

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Reference:

Exhibit 2

Question:

Please provide add a column to appendix 2-AA to show 2019 year-to-date actuals.

Response:

ENWIN has added a column to appendix 2-AA to show 2019 year-to-date actuals as of June 30, 2019. Please see SEC 8 - Attachment 1.

Attachment 1: Appendix 2-AA revised to include 06-30-2019 year-to-date actuals.

Appendix 2-AA
Capital Projects Table

Projects	Actuals											Budget	
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 YTD	2019 Bridge Year	2020 Test Year
Reporting Basis	**CGAAP**	**CGAAP**	**CGAAP**	**MIFRS**	**MIFRS**	**MIFRS**	**MIFRS**	**MIFRS**	**MIFRS**	**MIFRS**	**MIFRS**	**MIFRS**	**MIFRS**
System Access													
New customer connections	834,544	755,878	793,242	902,673	1,505,019	1,060,705	1,541,629	1,988,830	1,733,481	1,615,000	906,000	1,275,000	1,060,500
Externally driven projects	532,355	867,290	686,367	3,626,247	2,467,742	2,506,205	842,109	1,497,182	1,649,163	1,225,000	95,000	5,586,000	4,250,000
New metering services	240,721	6,819,988	3,619,122	1,341,228	930,545	795,630	378,378	459,611	580,797	470,000	168,000	406,000	417,000
Sub-Total	**1,607,620**	**8,443,156**	**5,098,731**	**5,870,148**	**4,903,306**	**4,362,540**	**2,762,116**	**3,945,623**	**3,963,441**	**3,310,000**	**1,169,000**	**7,267,000**	**5,727,500**
System Renewal													
Conversion programs	5,239,546	5,283,768	5,453,919	4,213,450	4,046,514	2,650,127	221,574	28,193	-	-	-	-	-
Sustainment programs	2,353,279	1,637,539	1,898,301	3,282,212	3,965,485	3,939,196	6,483,231	4,586,933	4,304,880	4,635,295	3,470,000	6,085,000	7,552,000
Metering programs	88,732	-	-	-	-	-	-	124,580	66,695	523,250	302,000	779,000	813,000
S.A.M Station Sustainment	166,754	-	-	-	-	85,627	1,181,674	475,149	736,144	427,658	193,000	425,000	75,000
Sub-Total	**7,848,312**	**6,921,307**	**7,352,220**	**7,495,662**	**8,011,999**	**6,674,950**	**7,886,479**	**5,214,855**	**5,107,719**	**5,586,203**	**3,965,000**	**7,289,000**	**8,440,000**
System Service													
Enhancement projects	140,299	-	274,478	829,729	1,323,731	2,788,900	6,117,981	2,281,610	3,644,473	4,086,895	447,000	3,576,000	3,549,000
SCADA	112,704	25,783	403,831	207,581	86,321	82,358	206,403	211,487	436,320	240,000	476,000	595,000	265,000
S.A.M Station Enhancements	-	-	48,324	19,174	8,560	-	443,129	698,102	242,744	100,000	1,000	50,000	200,000
Sub-Total	**253,003**	**25,783**	**726,633**	**1,056,484**	**1,418,612**	**2,871,258**	**6,767,513**	**3,191,199**	**4,323,537**	**4,426,895**	**924,000**	**4,221,000**	**4,014,000**
General Plant													
Building	515,522	581,138	470,405	504,553	194,885	574,788	357,412	191,140	351,588	354,000	78,000	2,592,330	1,521,000
Information Technology	7,135,713	8,741,067	3,062,904	1,957,935	4,209,952	4,125,004	2,991,333	1,844,987	1,387,208	1,733,000	442,000	2,005,400	1,719,000
Fleet & Welding	213,097	25,900	41,157	56,098	32,204	40,909	30,102	81,999	87,479	87,500	-	70,500	74,500
Tools	202,244	105,287	150,221	141,802	242,892	144,424	119,993	135,286	231,272	90,000	19,000	187,000	102,000
Sub-Total	**8,066,576**	**9,453,392**	**3,724,687**	**2,660,388**	**4,679,933**	**4,885,125**	**3,498,840**	**2,253,412**	**2,057,547**	**2,264,500**	**539,000**	**4,855,230**	**3,416,500**
Miscellaneous	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	**17,775,511**	**24,843,638**	**16,902,271**	**17,082,682**	**19,013,849**	**18,793,873**	**20,914,948**	**14,605,089**	**15,452,244**	**15,587,598**	**6,597,000**	**23,632,230**	**21,598,000**
Vehicles	-	-	-	-	-	-	-	-	-	833,547	181,000	2,652,178	1,604,576
Customer Contributions	(520,301)	(224,159)	(321,196)	(1,495,683)	(757,276)	(2,403,163)	(4,322,469)	(411,579)	(2,216,539)	(1,888,586)	(485,000)	(4,898,000)	(3,251,860)
Grand Total	**17,255,209**	**24,619,479**	**16,581,075**	**15,586,999**	**18,256,573**	**16,390,710**	**16,592,479**	**14,193,510**	**13,235,705**	**14,532,559**	**6,293,000**	**21,386,408**	**19,950,716**

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Reference:

Exhibit 2

Question:

Please provide a table that shows all material capital projects undertaken by the Applicant since 2009, that shows i) the original budget for the project, ii) the final budget for the project, iii) explanation of any variance +/- 5%.

Response:

ENWIN's practise is to complete variance reports for projects where actual spend is >+/-10% from budget/estimate and the variance is >$5,000. The reports receive various levels of sign-off depending on the quantum of the variance. ENWIN has a file that goes from approximately 2016 to 2018 which contains approximately 370 separate variance reports. Prior to 2016, the variance reports were signed off and filed in individual project files, many of which have now been transferred to records retention and are not easily accessible.

ENWIN has appended SEC 9 - Attachment 1, which is a table showing the material projects from 2016-2018 where the project variance exceeded 10% and $5,000. The attachment also includes copies of the signed variance explanations for each project.

Year	Project Number	WO#	Name	Total Estimate	Total Actual	Total Variance	Total % Var.
2016	HE.0056	22014014	COLLEGE SU'S - U/G MAIN	$912,940	$1,013,602	$100,662	11.03%
2018	HN.0735	22017109	CABANA PH 2 (Howard - Dougall) - MAIN	$543,322	$423,595	-$119,727	-22.04%
2017	HE.0066	22015124	55M3 CABLE UPGRADE WALKER TS1 - OH MAIN	$337,484	$238,687	-$98,797	-29.27%
2016	HS.0200	22012563	PR48 - MAIN	$325,495	$393,355	$67,860	20.85%
2016	HS.0259	22014985	McDougall SU Replacement Project - 25M8 & 25M12	$302,155	$374,530	$72,375	23.95%
2017	HE.0055	22014638	GM MTS 4M1 FEEDER - MAIN	$286,556	$387,158	$100,602	35.11%
2016	HS.0190	22014245	PR12 POLE REPLACEMENT - HS.0190 - MAIN	$256,776	$371,382	$114,606	44.63%
2017	HN.0653	22015099	58 Park- U OF W- OH/UG RELOCATION- CABLE	$256,082	$337,982	$81,900	31.98%
2016	HR.2015-140048	22010164	S/L POLE REPLACEMENTS - E.C.ROW STEEL	$244,220	$291,629	$47,409	19.41%

COST VARIANCE REPORT - PLEASE LINK TO WORK ORDER

WO # - DESC.	WO # 22014014 - COLLEGE SU's - U/G MAIN

PROJECT SCOPE SUMMARY

ORIGINAL SCOPE	AS CONSTRUCTED
Install 750MCM cable through existing ducts to 2 new SU's. Install 4/0 CU cable as the neutral for the 27.6kV circuits.	Window orientation changed in MH436 and at SU foundations. Grounded 25M5 and 25M7 West in MH436.

COST SUMMARY

COST CATEGORY	ESTIMATE	ACTUAL	VARIANCE	%VAR	%TARGET	RECOMMENDATION
LABOUR	$157,617	$196,330	$38,713	24.6%	10.00%	Add macro in CU for terminating in switching units or add labour and trucking manually based on the supervisor recommendation.
VARIANCE ANALYSIS Between track and field events in June causing high volumes of pedestrian traffic, U of W convocation, and the arrival SU's being delayed, operations were forced to put more resources on the job to meet the University of Windsor's shutdown. Also, there is no macro in CU for terminating cables at the SU.						
MATERIAL	$150,498	$709,251	$558,752	371.3%	10.00%	Add dead break elbow kits in CU.
VARIANCE ANALYSIS Actual costs of SU's came in under material. ($494,840.00). All dead break elbow kits were added into the work order manually. See detailed material variance report.						
TOOLS	$22,090	$19,317	($2,773)	-12.6%	10.00%	Nothing to be done.
VARIANCE ANALYSIS More men than trucks on site.						
SERVICE	$582,735	$88,704	($494,031)	-84.8%	10.00%	N/A
VARIANCE ANALYSIS Costs of SU's captured under services ($494,840.00)						
TOTAL	$912,940	$1,013,601	$100,661	11.0%	10.00%	See recommendation's above. -To be reviewed Further 2016-12-09
VARIANCE ANALYSIS See Variance analysis above.						

TECHNOLOGIST/ENGINEER	SIGNATURE	DATE
Anthony Astrologo	Anthony Astrologo	Nov 28/16

SIGN OFF FOR PROJECTS WITH GREATER THAN 10% VARIANCE (TOTAL)

ESTIMATE / ACTUAL			SIGNOR	SIGNATURE	DATE
Up to $5,000			Variance report not required		
>$150K	>$50k	>$5k	Engineering Manager	Steve Bartolomeo	Dec 9/16
			Director Engineering Director Distribution		
			VP Asset Management VP Operations		

COST VARIANCE REPORT - PLEASE LINK TO WORK ORDER

WO # - DESC.	22017109 - CABANA PH 2 (HOWARD - DOUGALL) - MAIN WORK

PROJECT SCOPE SUMMARY

ORIGINAL SCOPE	AS CONSTRUCTED
ROAD WIDENING - INSTALLING NEW POLES AND CONDUCTORS FURTHER BACK FROM THE ROAD. REPLACING EXISTING POLES WITH CONCRETE POLES AND DOUBLE CIRCUIT OF 795MCM	ROAD WIDENING - INSTALLING NEW POLES AND CONDUCTORS FURTHER BACK FROM THE ROAD. REPLACING EXISTING POLES WITH CONCRETE POLES AND DOUBLE CIRCUIT OF 795MCM

COST SUMMARY

COST CATEGORY	ESTIMATE	ACTUAL	VARIANCE	%VAR	%TARGET	RECOMMENDATION
LABOUR	$261,615	$170,505	($91,110)	-34.8%	10.00%	NONE
VARIANCE ANALYSIS As per the supervisor, extra hours were added to the cue for preliminary work to transfer the taps and transformers all to one circuit. Hours were also included for topping the concrete poles and meeting the 78 day deadline that we gave the city as a resonable timeline to complete construction. The labour cost of those extra hours is $36,108.66 and was not needed for this project. Also, a crane was used to install the 60' poles and all the poles were installed in 2 days (16 poles). Crews were very efficient.						
MATERIAL	$176,775	$183,290	$6,515	3.7%	10.00%	NONE
VARIANCE ANALYSIS						
TOOLS	$35,407	$30,116	($5,291)	-14.9%	10.00%	NONE
VARIANCE ANALYSIS Extra hours added to work order for preliminary work wasn't needed for this project. Directly related to labour costs and explanation.						
SERVICE	$69,525	$39,684	($29,841)	-42.9%	10.00%	NONE
VARIANCE ANALYSIS Service costs allowed for barrel and sign rentals ($10,400) which we did not end up needing. Flaggers were enough to control traffic during construction. Construction was completed ahead of schedule so flagger costs were less then expected. Also tree trimming costs ($3700) were not needed. Our crane actual cost was $9156, less than the $14400 that was estimated. Civil actual costs were $1500 less than estimated because we didn't need to trench as far as originally expected. Easment costs have not yet been included on the work order and that was estimated to be $2500.						
TOTAL	$543,322	$423,595	($119,727)	-22.0%	10.00%	NONE
VARIANCE ANALYSIS Refer to comments above.						

TECHNOLOGIST/ENGINEER	SIGNATURE	DATE
STACEY WOODS	Stacey Woods	**19-Dec-18**

SIGN OFF FOR PROJECTS WITH GREATER THAN 10% VARIANCE (TOTAL)

ESTIMATE / ACTUAL			SIGNOR	SIGNATURE	DATE
Up to $5,000			Variance report not required		
>$150K	>$50k	>$5k	Manager Engineering	Steve Bartoman	Dec 19, 2018
			Director Engineering		Dec 21, 2018
			Director Distribution		Dec-21/18
			VP Operations		19.01.02

Note: Copy of the report should be forwarded to Finance for all variances in excess of $50k (the total % variance would need to be above 10% as well).

Revised: Sept 26, 2017

COST VARIANCE REPORT - PLEASE LINK TO WORK ORDER

WO # - DESC.	22015124 - 55M3 Overhead and Cable Upgrade at Walker TS1 - OH Main

PROJECT SCOPE SUMMARY

ORIGINAL SCOPE	AS CONSTRUCTED
Install new poles and upgrade conductor to 795 MCM on feeder 55M3.	

COST SUMMARY

COST CATEGORY	ESTIMATE	ACTUAL	VARIANCE	%VAR	%TARGET	RECOMMENDATION
LABOUR	$141,080	$122,698	($18,382)	-13.0%	10.00%	Include leader in discussion along with supervisor before design phase.
VARIANCE ANALYSIS The labour cost was under budget because crews were able to isolate all feeders in the area and worked on it dead. The original plan did not include the isolation of all feeders in the work area.						
MATERIAL	$76,578	$88,952	$12,374	16.2%	10.00%	Adjust CU to include 1192 MCM components.
VARIANCE ANALYSIS The material cost was over budget because CU did not account for material required for 1192 MCM conductor.						
TOOLS	$19,876	$21,417	$1,540	7.7%	10.00%	no recommendations
VARIANCE ANALYSIS						
SERVICE	$99,950	$5,620	($94,330)	-94.4%	10.00%	no recommendations
VARIANCE ANALYSIS The service cost was under budget because cost for Hydro One work was charged directly to the project and not the work order. The actual cost for the services would be $75,382.95 if you include Hydro One invoice of $69,761.95. If the Hydro One invoice was charged to the work order the overall variance would be -8.6% therefore a variance would not be required.						
TOTAL	$337,484	$238,686	($98,798)	-29.3%	10.00%	Include leader in discussion along with supervisor before design phase and adjust CU to include 1192 MCM components.
VARIANCE ANALYSIS The cost was under budget because crews were able to work on the feeders while all feeders in the work area were isolated and the cost for the Hydro One work was charged directly to the project and not the work order.						

TECHNOLOGIST/ENGINEER	SIGNATURE	DATE
Tony Cinelli		May 28, 2018

SIGN OFF FOR PROJECTS WITH GREATER THAN 10% VARIANCE (TOTAL)

ESTIMATE / ACTUAL			SIGNOR	SIGNATURE	DATE
Up to $5,000			Variance report not required		
>$150K	>$50k	>$5k	Manager Engineering	Steve Bartolomeo	May 31, 2018
			Director Engineering		June 4, 2018
			Director Distribution		June 4/18.
			VP Operations		

Note: Copy of the report should be forwarded to Finance for all variances in excess of $50k (the total % variance would need to be above 10% as well).

Revised: Sept 26, 2017

COST VARIANCE REPORT - PLEASE LINK TO WORK ORDER

WO # 22012563	PR48 - MAIN

PROJECT SCOPE SUMMARY

ORIGINAL SCOPE	AS CONSTRUCTED
Enwin to remove existing 556mcm prmary circuit and poles . Replace with new 795mcm primary circuit on new concrete poles	Work was tendered out. Black & Mcdonald removed existing 556mcm prmary circuit and poles . Replaced with 2-795mcm parallel primary circuits on new poles

COST SUMMARY

COST CATEGORY	ESTIMATE	ACTUAL	VARIANCE	%VAR	%TARGET	RECOMMENDATION
LABOUR	$148,069	$0	($148,069)	-100.0%	10.00%	
VARIANCE ANALYSIS: Work contracted out to Black & Mcdonald. Labour costs captured under services below						
MATERIAL	$134,837	$151,173	$16,336	12.1%	10.00%	
VARIANCE ANALYSIS: Additional material was required to accommodate installation of second parallel overhead 795mcm primary circuit						
TOOLS	$22,525	$0	($22,525)	-100.0%	10.00%	
VARIANCE ANALYSIS: Work contracted out to Black & Mcdonald. Trucking costs captured under services below						
SERVICE	$20,064	$242,182	$222,118	1107.0%	10.00%	
VARIANCE ANALYSIS: Services work included concrete cutting ahead of project that was performed by Enwin civil contractor. It was later decided to tender the entire project out. Black & Mcdonald's labour & trucking costs are captured here under services						
TOTAL	$325,495	$393,355	$67,860	20.8%	10.00%	As Discussed, A Review/Revisions to Elements of CUE is Likely In Order
VARIANCE ANALYSIS: Initially Enwin was to perform the work of installing a 795mcm overhead primary 3 phase circuit on new concrete poles, however, it was decided to tender the project out and to also add a second parallel 795mcm overhead primary circuit. Black & Mcdonald were awarded the contract. The contacted amount was slightly higher than original Enwin CUE estimate due to the change in design to install the additional circuit, however, it is within 10% of the planned costs						

TECHNOLOGIST/ENGINEER	SIGNATURE	DATE
Jerry Raniwsky		12-Oct-16

SIGN OFF FOR PROJECTS WITH GREATER THAN 10% VARIANCE (TOTAL)

ESTIMATE / ACTUAL		SIGNOR	SIGNATURE	DATE
Up to $5,000		Variance report not required		
>$150K	>$5k	Engineering Manager	Steve Bantanen	Oct. 13/16
	>$50k	Director Engineering		JAN 5 2017
		Director Distribution		JAN 6/2017
		VP Asset Management VP Operations		Oct 19/16

COST VARIANCE REPORT - PLEASE LINK TO WORK ORDER

WO # - DESC.	22014985 - McDougall SU Replacement - McDougall & Pitt St.

PROJECT SCOPE SUMMARY

ORIGINAL SCOPE	AS CONSTRUCTED
Exlsting switching units for M12 and M8, located at the corner of McDougall and Pitt St, were replaced with two refurbished T&B switching units. Small amount of primary cable was installed between the units so that the system becomes redundant at this	The two units for M8 & M12 were replaced with new primary cable between the units and the removal of #4/0AWG cable between the units and the main manhole and the units that was no longer required.

COST SUMMARY

COST CATEGORY	ESTIMATE	ACTUAL	VARIANCE	%VAR	%TARGET	RECOMMENDATION
LABOUR	$57,008	$94,773	$37,765	66.2%	10.00%	Many of the additional labour hours could not have been planned for; however, the apprentice hours should be accounted for in future estimates. The number of splices that were required to be worked on for isolation from the downtown network should have been accounted for, especially as there were many.
VARIANCE ANALYSIS An additional 200 man hours were applied to this work order than what were originally planned for. The additional time in labour was a result from the increased time and effort that was required for the M8 & M12 network isolation that included switching and isolation of more than planned for H and Y splices that were required to be pulled apart and re-joined as part of the downtown network isolation. Apprentices were also used on this job for teaching purposes; this increased the labour result. A fault on the downtown network occurred during the implementation of the switching units; the fault caused additional man-hours to temporarily re-feed the downtown network which consisted of re-connecting splices that were temporarily apart for isolation. There was a lot of overtime associated with the downtown network isolation and re-connection.						
MATERIAL	$232,834	$264,489	$31,655	13.6%	10.00%	The terminal lugs and cable tags should have been added to the original estimate; it would have been difficult to assess the integrity of the ground grids in each vault however as they could not be assessed until the existing units were lifted off.
VARIANCE ANALYSIS The original estimate for each switching unit indicated $104,000; the final book value was quoted at $114,000 with a resultant added charge of $20,000. Other additional costs associated with the work order included the replacement of the existing ground grids in the existing concrete vaults; it was thought that the original ground grids were in adequate state for re-use, as well as various consumables including tags for each cable, new terminal lugs as the refurbished units didn't come equipped with the lugs, and the cable mounting brackets in each vault were replaced as the existing brakets were not deemed adequate for re-use.						
TOOLS	$2,005	$6,853	$4,848	241.8%	10.00%	
VARIANCE ANALYSIS The trucking on this job was underestimated and can attributed directly to the increase in labour and the downtown network issues.						
SERVICE	$10,308	$8,415	($1,893)	-18.4%	10.00%	
VARIANCE ANALYSIS The civil services were less then estimated to complete this job.						
TOTAL	$302,155	$374,530	$72,375	24.0%	10.00%	
VARIANCE ANALYSIS The major variances associated with this work order can be attributed to the additional labour unaccounted for due to unforeseen field obstacles and the original switch unit cost evaluation.						

TECHNOLOGIST/ENGINEER	SIGNATURE	DATE
Marianne Dent	Marianne D	**Aug 3 2017**

SIGN OFF FOR PROJECTS WITH GREATER THAN 10% VARIANCE (TOTAL)

ESTIMATE / ACTUAL		SIGNOR	SIGNATURE	DATE
Up to $5,000		Variance report not required		
>$150K	>$5k	Manager Engineering		August 8, 2017
	>$50k	Director Engineering		August 9 2017
		Director Distribution		August 10/17
		VP Operations		17-08-10

Revised: August 2, 2017

VARIANCE REPORT - PLEASE LINK TO WORK ORDER

WO # - DESC.	22014638 - GM MTS Feeder - Main Work Order

PROJECT SCOPE SUMMARY

	AS CONSTRUCTED
Provide labour, material and trucking to install 4M1 feeder and scada mate switches	See material variance analysis

COST SUMMARY

COST CATEGORY	ESTIMATE	ACTUAL	VARIANCE	%VAR	%TARGET	RECOMMENDATION
LABOUR	$103,089	$167,196	$64,107	62.2%	10.00%	Assign crew to the project durin the design phase to keep consistency through the project Limit apprentices assigned to a crew.
VARIANCE ANALYSIS The majority of extra labour was caused by trying to complete as much work on the 2016 budget as possible which resulted in the creation of a new crew with 3 apprentices and two job leaders that split time on the project. Labour was also impacted by the frozen ground that required extra time for Rapid to excavate holes. Another impact to labour was working with 1192 conductor that required isolation and outages and the additional labour associated with implementing material/design changes.						
MATERIAL	$159,579	$179,359	$19,781	12.4%	10.00%	Update design guide to questio solid blade switch requirements a riser or dip pole (first out of TS Update scada mate CU to inclu animal guards.
VARIANCE ANALYSIS Installed $2,800 solid blade switch to optimise operation and isolation of the circuit. Installed new 55FT pole for scada mate switch to simplify installation. Installed animal guards at both scada mates that were not included in CU. Animal guards must be manually entered. This is in a new work instruction. JB Changed five 7FT cross arms to 9FT cross arms to open up spacing.						
TOOLS	$14,966	$26,026	$11,061	73.9%	10.00%	None
VARIANCE ANALYSIS See labour comments						
SERVICE	$8,922	$14,577	$5,655	63.4%	10.00%	None
VARIANCE ANALYSIS Rapid charged for extra labour because the ground was frozen. Rapid charged extra to excavate frozen ground around old poles so EnWin could pull the old poles.						
TOTAL	$286,555	$387,158	$100,603	35.1%	10.00%	None
VARIANCE ANALYSIS Refer to comments above The apprentice make-up of specific jobs needs to be disdussed in advance of estimates and included in the work order estimate. This will be determined in the design review/ planning stages. JB						

TECHNOLOGIST/ENGINEER	SIGNATURE	DATE
Steve Zambito	Steve Zambito	**16-Jun-17**

ARRANGE FOR SIGN OFF FOR PROJECTS WITH GREATER THEN 10% VARIANCE (TOTAL)

JOB ESTIMATE			SIGNOR	SIGNATURE	DATE
Up to $5,000			Variance report not required		
>$150K	>$50k	>$5k	Manager Engineering	Steve Zambito	2017-06-1
			Director Engineering		2017-06-1
			Director Distribution		2017-06-16
			VP Operations		17.08.10

COST VARIANCE REPORT - PLEASE LINK TO WORK ORDER

WO # - DESC.	22014245

PROJECT SCOPE SUMMARY

ORIGINAL SCOPE	AS CONSTRUCTED
ELLIOTTE ST EAST OF CRAWFORD TS. ALLEY E. OF JANETTE FROM ERIE TO WYANDOTTE POLE REPLACEMENT	ELLIOTTE ST EAST OF CRAWFORD TS - PLUS 25M10, 25M11 RECONFIGURATION.

COST SUMMARY

COST CATEGORY	ESTIMATE	ACTUAL	VARIANCE	%VAR	%TARGET	RECOMMENDATION
LABOUR	$85,389	$158,413	$73,024	85.5%	10.00%	ACCOUNT OUTAGES. 25MM11 RECONFIG. COULD BE CHARGED TO ANOTHER WO#. INCREASE COMP. FACTOR (STN#12,13)
VARIANCE ANALYSIS DID NOT ACCOUNT FOR OUTAGES OR 25M11 RECONFIGURATION TO ELIMINATE THE RADIAL FEEDS BOUNDED BY ELLIOT, WYANDOTTE, VICTORIA AND BRUCE. ONLY INCREASED THE COMPLEXITY FACTOR FOR THE JUNCTION POLES AT STATIONS 12 &13 TO TWO. $26,579.17 EXTRA IN APPRENTICE COSTS.						
MATERIAL	$154,606	$177,281	$22,675	14.7%	10.00%	
VARIANCE ANALYSIS PLEASE SEE ABOVE						
TOOLS	$12,569	$30,546	$17,977	143.0%	10.00%	
VARIANCE ANALYSIS PLEASE SEE ABOVE						
SERVICE	$4,212	$5,142	$930	22.1%	10.00%	ACCOUNT FOR CRANE COSTS
VARIANCE ANALYSIS DID NOT ACCOUNT FOR JAKE'S CRANE SERVICE - $1,237.5						
TOTAL *	$256,776	$371,382	$114,605	44.6%	10.00%	
VARIANCE ANALYSIS PLEASE SEE ABOVE						

TECHNOLOGIST/ENGINEER	SIGNATURE	DATE
Robert Richardson		20-Sep-17

SIGN OFF FOR PROJECTS WITH GREATER THAN 10% VARIANCE (TOTAL)

ESTIMATE / ACTUAL			SIGNOR	SIGNATURE	DATE
Up to $5,000			Variance report not required		
>$150K	>$50k	>$5k	Engineering Manager	Steve Bantoman	Sept. 28, 2017
			Director Engineering Director Distribution		
			VP Asset Management VP Operations		

* VARIANCE > $100,000 - send signed copy to Finance

COST VARIANCE REPORT - PLEASE LINK TO WORK ORDER

WO # - DESC.	22015099 - 58 Park- U of W- OH/UG Relocation- Cable Pulling

PROJECT SCOPE SUMMARY

ORIGINAL SCOPE	AS CONSTRUCTED
To install underground system that includes a 3-way auto-transfer switch, a 300kVA 120/208V pad transformer and 100KVA 120/240V minipad transformer. Also, to run primary and secondary cables into existing ducts and make the final connections at the new switch, transformers and in manholes.	Significant changes to duct run designs necessitated by field conditions such as sanitary sewer locations.

COST SUMMARY

COST CATEGORY	ESTIMATE	ACTUAL	VARIANCE	%VAR	%TARGET	RECOMMENDATION
LABOUR	$48,198	$68,349	$20,150	41.8%	10.00%	Design review session should incorporate a discussion of the crew and vehicle complement to be used; this step has recently been added to the design review session document. Potentially CU will need to be adjusted based on these design reviews and actual labour hours.
VARIANCE ANALYSIS The variance in labour cost was due to the actual installations that required multiple outage arrangements and feeder isolations to energize 3 pad mount transformers including the new one for the university. There were separate outages that needed to be arranged to energize each transformer. WERE THERE ADDITIONAL ENGINEERING COSTS RELATED TO THE DESIGN REVISIONS & COMPLICATIONS? MP. YES, BUT IN ENG. WORK ORDER						
MATERIAL	$127,430	$124,369	($3,061)	-2.4%	10.00%	
VARIANCE ANALYSIS No variance.						
TOOLS	$3,454	$5,651	$2,197	63.6%	10.00%	
VARIANCE ANALYSIS See labour variance.						
SERVICE	$77,000	$139,613	$62,613	81.3%	10.00%	Recommend that when doing civil work in potentially congested/old area, that sufficient buffers to estimates be considered.
VARIANCE ANALYSIS Estimated services in the work order were for the civil work only and calculated according to the line items in the annual contract. Due to long field discussions with the general contractor regarding the underground conflicts with the new University sanitary sewers and the field changes to the duct run plans, we agreed to be billed by our civil contractor according to time and material only. The total extra cost for the civil work is $52,262.00. Other services not estimated in the work order are the electrical contractor and the crane services in the total amount of $10,350.50.						
TOTAL	$256,082	$337,981	$81,899	32.0%	10.00%	See detailed package provided that includes S&C invoices and subcontractor invoices, inspection sheets, a Rorison invoice and a Golder Associates invoice.
VARIANCE ANALYSIS The total variance of $81,899 is due to extra civil work, electrical contractor and outages costs.						

TECHNOLOGIST/ENGINEER	SIGNATURE	DATE
Anwar Nagar	Anwar Nagar	**Oct/01/2018**

SIGN OFF FOR PROJECTS WITH GREATER THAN 10% VARIANCE (TOTAL)

ESTIMATE / ACTUAL			SIGNOR	SIGNATURE	DATE
Up to $5,000			Variance report not required		
>$150K	>$50k	>$5k	Manager Engineering	Steve Bantourmen	Oct 2, 2018
			Director Engineering	[signature]	oct 2, 2018
			Director Distribution	[signature]	Oct. 3/2018.
			VP Operations	[signature]	18.10.10

Note: Copy of the report should be forwarded to Finance for all variances in excess of $50k (the total % variance would need to be above 10% as well).

Revised: Sept 26, 2017

COST VARIANCE REPORT - PLEASE LINK TO WORK ORDER

WO # - DESC.	22010164 - EC Row Streetlight Pole Replacements

PROJECT SCOPE SUMMARY

ORIGINAL SCOPE	AS CONSTRUCTED
Provide labour, material and trucking to install 33 - 49'-6" steel streetlight poles on EC Row for the City of Windsor	

COST SUMMARY

COST CATEGORY	ESTIMATE	ACTUAL	VARIANCE	%VAR	%TARGET	RECOMMENDATION
LABOUR	$58,311	$66,157	$7,846	13.5%	10.00%	None
VARIANCE ANALYSIS: Extra time was required to coordinate traffic control with Sherway and repair damaged underground cable.						
MATERIAL	$96,645	$100,929	$4,284	4.4%	10.00%	None
VARIANCE ANALYSIS						
TOOLS	$6,981	$10,798	$3,817	54.7%	10.00%	None
VARIANCE ANALYSIS: Refer to labour comments above						
SERVICE	$82,283	$113,745	$31,462	38.2%	10.00%	Estimate for work to be completed on weekends or midnight to minimise traffic impact.
VARIANCE ANALYSIS: Heaton was added to the project to expose streetlight conductor at each pole. S & C charged shift premiums for night and weekend work to avoid lane and ramp closures during peak travel times. These extras were approved by Tiffany Pocock from the City of Windsor.						
TOTAL	$244,219	$291,629	$47,410	19.4%	10.00%	None
VARIANCE ANALYSIS: Refer to comments above						

TECHNOLOGIST/ENGINEER	SIGNATURE	DATE
Steve Zambito	Steve Zambito	Oct. 4/16

SIGN OFF FOR PROJECTS WITH GREATER THAN 10% VARIANCE (TOTAL)

ESTIMATE / ACTUAL			SIGNOR	SIGNATURE	DATE
Up to $5,000			Variance report not required		
>$150K	>$50k	>$5k	Engineering Manager	Steve Bartoumeu	Oct. 4/16
			Director Engineering		Oct 4, 2016
			Director Distribution		Oct. 11/16
			VP Asset Management VP Operations		

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Reference:

Exhibit 2, page 42

Question:

Please explain the basis for the 'plan' amount in each year.

Response:

ENWIN outlines the basis for "plan" on page 232 of Exhibit 2:

Throughout this analysis, "Plan" in 2009 refers to the budget submitted through ENWIN's CoS application for 2009 rates. Thereafter, "Plan" refers to ENWIN's internal capital budget amounts through 2013. Through this period, the concept of investment category did not exist and for purposes of this review, the "Plan" amounts represent the budget line items according to the categories for expenses established in the Chapter 5 filing requirements. In 2014, "Plan" refers to those amounts filed in the 2014 DSP. Thereafter, "Plan" refers again to ENWIN's internal capital budget amounts.

ENWIN's internal capital budget process is outlined on page 40 of Exhibit 2.

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Reference:

Exhibit 2, page 41

Question:

Please explain the drivers of the significant increase in annual; actual/forecast annual spending between 2013-2018 and 2019-2024.

Response:

The drivers of significant changes in capital spend between 2013 and 2018 are explained on pages 48 to 54 of Exhibit 2. The increase in forecast spending for 2019 is explained on page 55. The main reason for the increase is the renovation cost for ENWIN's Rhodes Drive Operations Centre to allow for site consolidation. For 2020, the spending is expected to decrease as explained on page 56 of Exhibit 2. For 2021 to 2024, net capital spending is expected to stabilize and ranges from $17.8 million to $18.8 million as shown in Table 2-23 on page 42 of Exhibit 2.

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Reference:

Exhibit 2, Attach 2-A

Question:

For each material capital project in 2019 and 2020, please provide the estimated in-service date.

Response:

In-service dates for material capital 2020 projects are provided in Appendix F – Material Investment Summaries under the section entitled, "Expenditure Information & Timing". The following table has summarized those in-service dates and incorporated several expenditures unique to 2019. Please see the table below.

2019 & 2020 Capital Investment In-Service Date

Year	Capital Investment Description	In-Service Date
'19	Conductor Upgrade (Morton/Ojibway	Q4
'19	Conductor Upgrade (Tecumseh/Jefferson)	Q3
'19	NSD 70 Replacement (2019)	Q4
'19 & '20	O/H Customer Connections	Throughout Year - As needed
'19 & '20	U/G Customer Connections	Throughout Year - As needed
'19 & '20	Bridge Plaza Relocation	Throughout Year - As needed
'19 & '20	Ambassador Bridge Twin Span	Throughout Year - As needed
'19 & '20	Road Widening Projects (City Driven Specifics)	Throughout Year - As needed
'19 & '20	Riverside Vista Project (City Driven Specifics)	Throughout Year - As needed
'19 & '20	Meter work - new customers (enhancement)	Throughout Year - As needed
'19 & '20	Meter work - end of life (sustainment)	Throughout Year - As needed

'19 & '20	Meter Population Replacement / Upgrade (MIST Meters)	Throughout Year - As needed
'19 & '20	Reactive Replacement of Failed Equipment (U/G, O/H)	Throughout Year - As needed
'19 & '20	Reactive Replacement of Failed Cable	Throughout Year - As needed
'19 & '20	Reactive Replacement of Transformers	Throughout Year - As needed
'19 & '20	Reactive Pole Replacement	Throughout Year - As needed
'19 & '20	Reactive Pole Pulling	Throughout Year - As needed
'19 & '20	Reactive Hardware Replacement Program	Throughout Year - As needed
'19 & '20	Reactive Manhole/Vault Rehabilitation	Throughout Year - As needed
'19 & '20	Retest Smart Meters	Throughout Year - As needed
'19 & '20	Miscellaneous TS Equipment, EOL Replacement - Reactive	Throughout Year - As needed
'19 & '20	Weld / Meter Shop / Stores / Garage Misc Site - Reactive	Throughout Year - As needed
'19 & '20	Pole Sustaining Program	Throughout Year - As needed
'19 & '20	Manhole Rebuild Program	Q3
'19 & '20	Submersible Sustainment Program	25%-Q2, 25%-Q3, 50%-Q4
'19 & '20	O/H 3-Phase Transformer Sustainment	Throughout Year - As needed
'19 & '20	Removal of PMH-4 & PMH-Specials	Throughout Year - As needed
'19 & '20	UG PadMount Sustaining Program	Throughout Year - As needed
'19 & '20	Switching Unit Sustaining Program	Q3, Q4
'19 & '20	Automating Underground Switching Units	Q2, Q3
'19 & '20	Meter Tank Replacement	Throughout Year - As needed
'19 & '20	Underground Cable Sustainment (Sub Division)	25%-Q2, 25%-Q3, 50%-Q4
'19 & '20	Customer SU Vault Sustainment	Q4
'19 & '20	SCADA Misc Sustaining	Throughout Year - As needed
'19 & '20	SCADA communications Equipment	Throughout Year - As needed
'19 & '20	Life Cycle Upgrades	Throughout Year - As needed
'19 & '20	GIS Evolution and Integration	Throughout Year - As needed
'19 & '20	SAP Evolution	Throughout Year - As needed
'19 & '20	Network Infrastructure Update and Cyber Security	Throughout Year - As needed
'19 & '20	Customer Relationship, Billing and IVR	Throughout Year - As needed
'19 & '20	Strategic Enhancements and Tools	Throughout Year - As needed
'19 & '20	Site Rhodes	Throughout Year - As needed
'19 & '20	Hydro Operations Vehicles	Throughout Year - As needed
'19 & '20	Hydro Metering Vehicles	Throughout Year - As needed
'19 & '20	Hydro Engineering Vehicles	Throughout Year - As needed
'19 & '20	Site Rhodes Vehicles	Throughout Year - As needed
'19 & '20	Mail Room Vehicles	Throughout Year - As needed

'19 & '20	SCADA FCI's	Q2,Q3
'19 & '20	Operations Tools	Throughout Year - As needed
'19 & '20	Engineering Tools	Throughout Year - As needed
'19 & '20	Meter Shop Tools	Throughout Year - As needed
'19 & '20	Records Management System	Throughout Year - As needed
'19 & '20	Feeder Balancing	Throughout Year - As needed
'19 & '20	Engineering Power Quality	Throughout Year - As needed
'20	Wholesale Metering: Keith TS Feeders	Q1
'20	Radial Branch Backups (23M2 - Single Phase)	Q1
'20	Sectionalizing Load Break Switches	Q3, Q4
'20	Feeder Tie - 15M11-55M24	Q3
'20	Green Energy Plan/Walker 2 Reactors - Transfer trip pilot	Q4
'20	Radial Branch Backups (55M1)	Q2
'20	Walker Road-Foster to Airport Rd	Q3, Q4
'20	Conductor Upgrade (23M2 LPT1)	Q2, Q3
'20	Vacuum Switch Replacements	Q4
'20	CPP Switch Controller Replacements	Q4
'20	Conductor Upgrade (55M21 LPT1)	Q2, Q3, Q4
'20	Feeder Reliability Improvement Project - Prince to Brock	Q2, Q3, Q4
'20	25M7 Feeder Ring Project	Q2. Q3

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Reference:

Exhibit 2, Attach 2-A

Question:

Please provide a detailed chronology of the capital planning process that led to the capital plan contained in this application.

Response:

The components and process of ENWIN's Asset Management Process (AMPRO) is described in section 5.3.1 (b) of the DSP and is reproduced here in italics.

> *The AMPRO (which was briefly discussed in Section 5.2.1 (c) of the DSP, above) begins with an analysis of the assets, the purpose of which is to consider whether the assets meet ENWIN's requirements related to safety, reliability, sufficiency, capital efficiency, risk minimization and sustainment, now and into the future. Outputs from this activity include a list of projects and programs which are necessary to ensure that core assets are able to deliver value to customers and other stakeholders in the future. These projects and programs will be described along with the rationale for their undertaking including the benefits to be gained and the resource expenditure required.*
>
> *Asset planning uses as inputs, the output of the asset knowledge, system performance review and risk review activities as well as system operational assessments and comparisons to determine any mismatch against design criteria.*
>
> *Each supply station and feeder is reviewed for deficiency and opportunity; as is the interconnected distribution system. The review is intended to:*
>
> 1. *identify assets at risk because of their health assessment or location;*
> 2. *determine the sufficiency of the assets to serve for expected load growth;*
> 3. *determine the operational sufficiency of the system to support itself during contingencies;*

4. *determine where assets fail to meet the design criteria for which they are intended to comply;*
5. *determine deficiencies and opportunities to enable assets to fulfill future requirements (i.e. accommodating REG and DER, serving EV loads, etc.); and*
6. *determine deficiencies and opportunities to enable service improvements for customers (i.e. smart grid, increased reliability, home automation, etc.).*

The output of the asset planning activity will be a series of projects that will provide value in accordance with the established strategic values. The projects are also assessed at a high level for the resource requirements needed to complete the project. The assessments and projects are summarized in the AMP. The AMP is a comprehensive study which provides a load forecast for the short and long term, reviews future requirements that the grid may be asked to accommodate (i.e. reverse power flow from DER, EV loading, load and generation management, etc.), reviews current grid capabilities, reviews current reliability and sufficiency, and provides a roadmap of activities needed to sustain the electricity distribution infrastructure in both the short and long term.

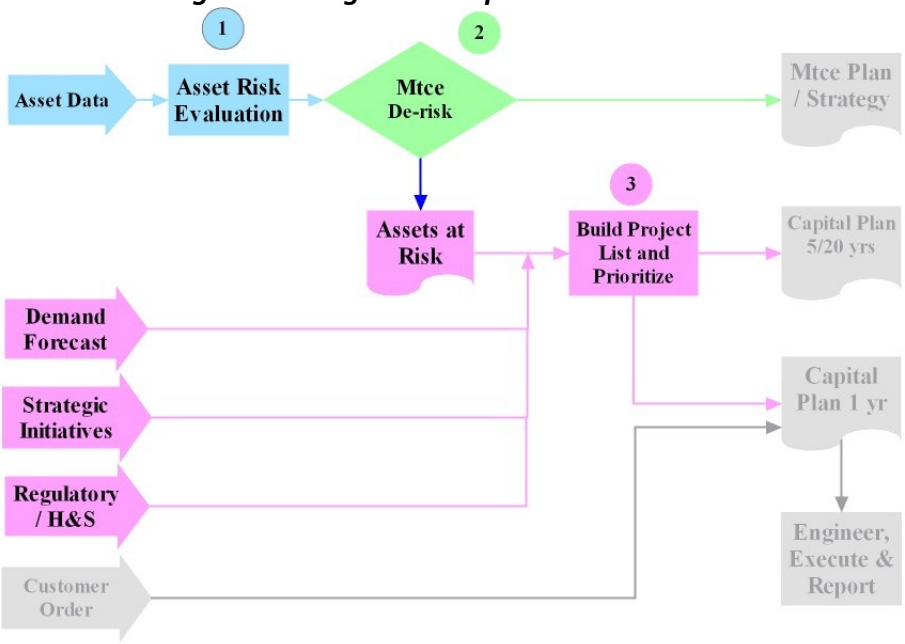
It is likely that a number of issues and opportunities will be identified through this process, which will apply across a number of feeders or the entire distribution system. In these cases, the issue or opportunity is defined as a "program" to be considered as a single opportunity rather than a multitude of activities across a number of feeders. Additionally, during the asset planning activity, any project dependencies will be identified so that these dependencies can be considered when reviewing and evaluating projects. These programs will be identified and go forward for review and evaluation as an entity.

The AMS produces a plethora of projects aimed at satisfying the corporate values and strategic objectives. In order to move forward with the most appropriate projects, the projects must be reviewed and prioritized. The project prioritization activity facilitates the identification of projects by priority.

The planning objectives that are considered relate to ENWIN's values of safety, reliability, sufficiency, capital and operating efficiency, risk minimization and sustainability. Additionally, capital investment decisions must ensure that appropriate resources are available to complete mandatory System Access projects such as new customer connections, road widenings, and other OEB mandates such as smart meters. These are balanced against expenditures for System Renewal, System Service and General Plant. Expenditure requirements are considered against inputs from customer engagement activities, as well as ENWIN's desire to minimize and smooth rate increases while satisfying the stated needs and preferences of the customers.

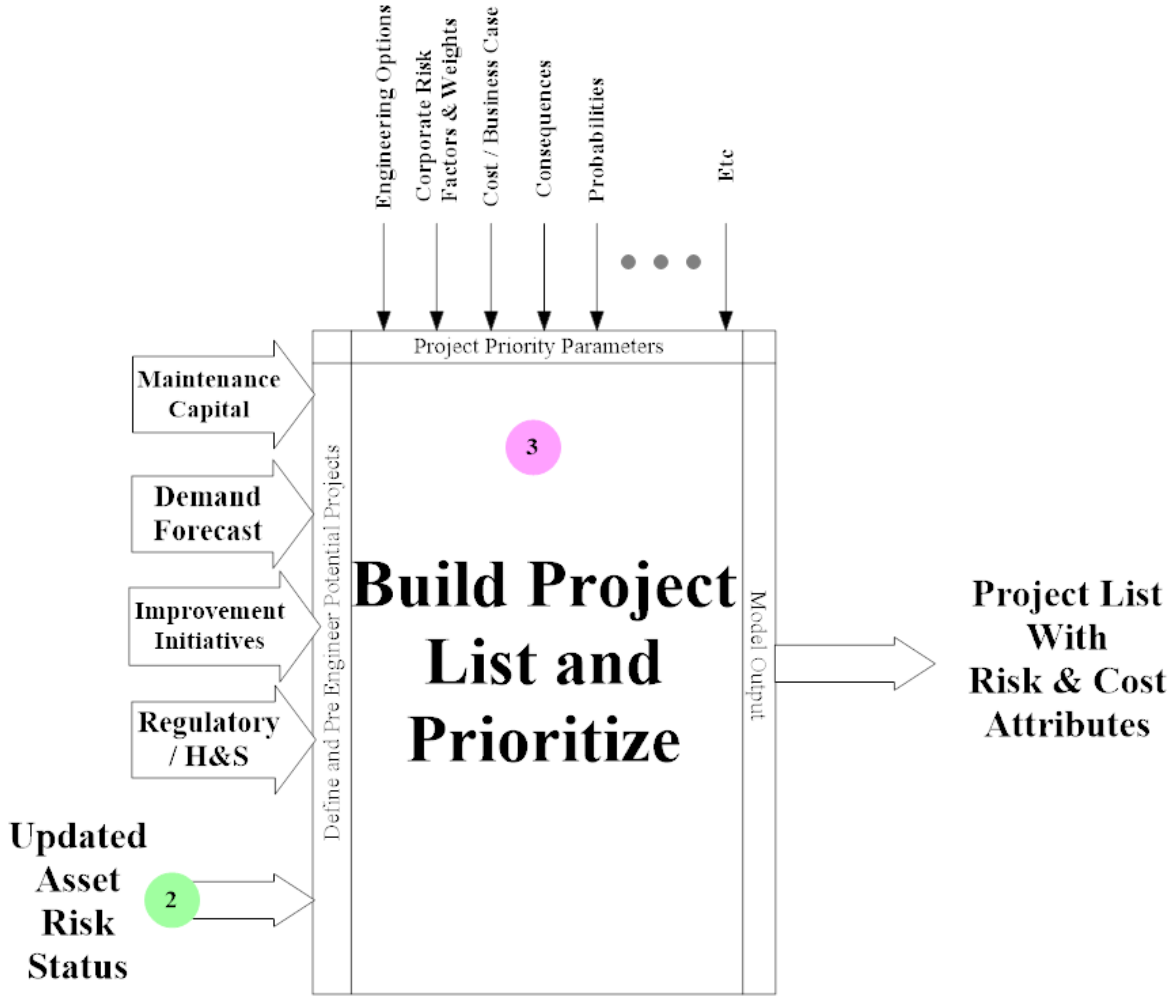
The high-level AMPRO is shown in Figure 13 below:

Figure 1 High Level Inputs to AMRPO



High-value potential capital projects may be defined and pre-engineered to more accurately determine the implementation cost. Inputs from all sources that account for regional growth forecasts, regulatory influences, strategic initiatives, health and safety as well as a list of high risk assets (step 1 in the model shown) will be used to determine all of the potential capital projects. Each capital project will be prioritized based on the pre-established strategic goal weighting factors. The simplified model is shown in Figure 14 below:

Figure 2 High Level Inputs to Project Prioritization Within AMPRO



ENWIN's asset plans and capital budgets are also informed by the following:

Asset Capacity Utilization / Constraint Assessment:

ENWIN also reviews its assets for sufficiency. In particular, the loading of transformers is reviewed relative to their capacities. Where transformers appear to be significantly overloaded, that loading is verified and, where the loading is indeed over the transformer's capacity, those transformers are scheduled to be changed and upgraded. Similarly, transformers that are significantly under-loaded may be considered for replacement.

The distribution system is also reviewed on a feeder-by-feeder basis with the intention of identifying any areas where operational liabilities exist. These may be in the form of undersized cables, feeders whose load has grown and that cannot be backed up by other feeders, critical lines that cannot be accessed at certain times of the year or during storms, switches whose automation would greatly increase the speed of isolation and restoration of parts of a circuit during an outage, etc. This review also identifies areas of the system that do not meet design criteria for either serving of load or maintenance of reliability. This review will identify areas where reliability improvements could be obtained or risk mitigated through the identification of projects which are brought forward for consideration.

ENWIN also performs a review of system growth and identifies areas with vacant land and the capacity for growth. The outcome of this review is compared to the capacity of the existing distribution system to accommodate that growth. Where deficiencies exist, remedial projects are identified. In general, network expansions do not occur unless there are real customers requesting service. Nevertheless, it may be appropriate to size a network replacement for asset health or other reasons so that it can accommodate anticipated growth in the future. In some cases, where load growth is more certain, projects may be initiated and forwarded for consideration in the short term.

ENWIN also reviews renewable generator connection requests, prepares forecasts for future requests, and compares this forecast with the system capacity to accept generation. Where deficiencies exist to accommodate renewable generation, ENWIN develops plans to expand or enhance the distribution system to accommodate increased levels of renewable generation.

Historical Period Data on Customer Interruptions caused by Equipment Failure:

ENWIN monitors outages by cause and produces monthly and annual reports showing this. Preventable causes, in particular, are noted and reviewed so that any trends are taken into account in the development of capital and maintenance plans. Equipment failure is noted in particular, as ENWIN's intention is to generally replace equipment prior to failure and on a planned basis to minimize customer inconvenience. For

example, outages due to tree contacts are reviewed and are an indicator of the success of ENWIN's vegetation management program.

Reliability-based 'Worst Performing Feeder' Information and Analysis

A worst performing feeder analysis is performed annually and informs capital and maintenance priorities in the annual budgeting process. The number of customers affected by a feeder outage is taken into consideration in the determination of the relative ranking of feeder performance. By giving priority to projects intended to improve reliability on worst performing feeders, ENWIN tries to improve the experience of the most customers with the poorest reliability. At present, ENWIN's means of assessing individual customers' reliability experience is only able to be done manually, so ENWIN is unable to rank reliability performance by customer. The worst performing feeder determination is done using a summation of the last 3 years of history and using number of outages, duration of outages, number of momentary outages, and number of customers affected by each outage.

Reliability Risk / Consequence of Failure Analyses:

Reliability risk and consequence of asset failure are part of ENWIN's AMPRO and dealt with in project pacing and prioritization. ENWIN analyses the risk of proposed projects in terms of their likelihood and consequence profile. The projects are prioritized by dividing the total cost of the project by the change in the risk score which calculates the "Risk Reduction Factor". This is performed using PROSORT.

The capital budget is also informed by a forecast for System Access expenditures for new customer connections and other mandatory investments such as road widenings and mandated regulatory programs. As well, general plant expenditures that facilitate the provision of distribution services are also considered.

The quantum of the capital budget is initially informed by the approved budgets in the last cost of service application as well as on-going customer engagements which solicit feedback from customers regarding what the customer is willing to pay for distribution services and the quality and reliability of those services. Within the budget envelope, prioritized projects are selected and promoted to the capital budget for the planning year. Occasionally, it is judged that there are projects on the prioritized list that are important, yet unable to be accommodated within

the budget envelope. Where the budget envelope is insufficient to avoid a strong risk of negative outcomes for customers, then a reconsideration of the quantum of the capital budget and the customer's willingness to pay to mitigate the risk of the negative outcomes is undertaken. The reconsideration of the budget envelope will necessarily include options for funding that envelope.

Where it is judged that the risk of negative outcomes is able to be sufficiently mitigated with a lower capital budget envelope, then a reconsideration of the budget envelope would also be undertaken including options for reducing that envelope.

2 - SEC - 14

Reference:

Exhibit 2, Attach 2-A

Question:

Please explain how planning process set out in this application has changed since its last application before the Board for 2009 rates.

Response:

The planning process with respect to the distribution system capital investment plan (i.e. the Distribution System Plan) is more sophisticated and rigorous than the capital planning process that was used in preparing the 2008 application for 2009 rates. At the time of the 2009 rate application, ENWIN did not have a formal Asset Management Planning process but instead synthesized input from a variety of sources into a final capital plan. Since that time, ENWIN has developed a documented Asset Management Planning process and has formalized the asset inspection program upon which the results of the asset management planning process are founded. Additionally, from a network operations perspective, since the 2009 rate application, ENWIN has introduced and uses the CYME network analysis software platform to analyze the operation of its distribution system. This provides a significant improvement on the prior capabilities for system analyses which relied on assumed loading, network configuration approximations and one-off, single feeder voltage drop analyses. Additionally, ENWIN has adopted a commercial project prioritization program to assist in the prioritization and selection of projects and programs that offer the greatest value to customers. Finally, ENWIN has undertaken an effort to better inform customers about its plans and to solicit customer feedback about those plans so that the 2020 rate application is informed by the desires of ENWIN's customers.

As a result of these improvements, the 2020 rate application is based on a much more solid base of facts regarding the condition and operation of its distribution system as well as the desires of its customers with regard to the balance between cost and reliability.

2 - SEC - 15

Reference:

Exhibit 2, Attach 2-A

Question:

For each of the Applicant's major asset/asset categories, please provide a table that shows for each and for each year since 2009 to 2025: a) the number of assets replaced/forecast to be replaced, b) the cost/forecast cost to replace.

Response:

ENWIN has not tracked the number of assets replaced by year. Forecasts are done in terms of financial investment and are roughly linked to the number of assets to be replaced each year. While the condition of specific assets is the basis for the development of System Renewal projects, those projects are framed early in the process into financial investments and tracking thereafter is done on a dollar basis.

ENWIN's GIS is a relatively new development and only recently (2016) became sufficiently reliable, after a comprehensive pole inspection program, to provide reasonable asset counts and age data. Even at that, ENWIN tracks asset age but does not distinguish between assets that were installed new vs. those that were installed as a replacement.

2 - SEC - 16

Reference:

Exhibit 2, Attach 2-A, Page 56

Question:

Please provide a table that shows the Applicant's SAIDI and SAIFI for each year since 2009 excluding loss of supply and major event days.

Response:

Please see the table below. Prior to 2016, ENWIN did not track major event days although there were major event days in 2011, 2012, 2013, 2016 and 2018. Prior to 2010, ENWIN did not track Loss of Supply events.

	2018	**2017**	**2016**	**2015**	**2014**	**2013**	**2012**	**2011**	**2010**	**2009**
SAIFI	2.9681	1.7509	2.0697	1.9949	1.9080	2.4214	2.1213	2.7206	1.7926	1.1790
SAIFI LOS	2.7476	1.6972	1.4257	1.8765	1.8463	2.2862	1.8389	2.6891	1.7926	
SAIFI MED	2.4442	1.7509	1.8330	1.9949	1.9080	2.4214	1.7593			
SAIFI LOS MED	2.2237	1.6972	1.2330							
SAIDI	1.3246	0.7301	0.9646	1.0657	0.8114	1.0163	1.0374	2.4796	0.9778	0.5527
SAIDI LOS	1.2767	0.7243	0.6355	1.0606	0.8063	0.9395	1.0039	2.4532	0.9778	
SAIDI MED	1.1559	0.7301	0.7986	1.0657	0.8114	1.0163	0.8319			
SAIDI LOS MED	1.1080	0.7243	0.4783							

2 - SEC - 17

Reference:

Exhibit 2, Attach 2-A, Page 64

Question:

Please revise table 18 and 19 to include information from 2009 to 2012.

Response:

Please see the response to VECC-9.

2 - SEC - 18

Reference:

Exhibit 2, Attach 2-A, Page 110

Question:

Before Kinetrics undertook an ACA in 2017, has the Applicant had a ACA or similar analysis of the condition of its assets. If so, please provide a copy of previous versions of the ACA or similar analysis since 2009.

Response:

Please see the response to AMPCO 12, Attachment 1.

2 - SEC - 19

Reference:

Exhibit 2, Attach 2-A, Page 183

Question:

The evidence states: "Since price is of critical importance to its customers, ENWIN has responded by pacing and deferring investments. In some cases, projects that were originally intended to be completed in the DSP were not pursued due to the cost of the project and the benefit." Please provide full details of the changes made the capital plan after the Applicant undertook its customer engagement activities. Please quantify the impact to the test year budget of the changes made.

Response:

ENWIN has always had a mandate to ensure the service it provides is affordable to ratepayers and ENWIN always reviews its plans with that in mind. There were several recent projects that were not pursued due to high costs and as a result of the prioritization tools and processes implemented by ENWIN. The following are projects that were altered, cancelled or deferred as costs were judged to be not in alignment with ENWIN's goal to provide an affordable service to its customers.

55M21/22 pole replacement project: Due to the extremely expensive labour involved in replacing the poles along a rail track, the project was reconfigured to another running line with consequent lower cost and added benefits.

Point to Multi-point Transfer Trip: ENWIN considered a proposed pilot for ENWIN to work with a consultant to perform a pilot project for a single to multi point remote trip solution. There were technical and costs concerns about the proposed solution and during a Hydro One customer meeting ENWIN was advised that Hydro One had already tested this solution and decided not to implement it. The pilot project was consequently cancelled.

Transfer Trip Replacement for Transmission Connected Stations: ENWIN considered replacing its aging transfer trip equipment serving its automotive transformer stations and its Walker 2 station because the station equipment was at end of life and the phone lines that connected them were frequently failing and out of service for a critical service. ENWIN judged the cost to be too high for customers to bear and modified the project to replace the equipment in only

one station while reserving that equipment as spares for the remaining stations which ENWIN will run to failure for as long as it can keep a spare. ENWIN also decided to work with the communication company to try to get them to improve the level of service they provide.

West End Transformer Station: ENWIN has a number of large customers located in an industrial park in the west end of the City. Those customers have great sensitivity to power quality disturbances and there is land for load growth potential in that area. In ENWIN's DSP filed in 2014, ENWIN had planned to construct a new transmission connected transformer station in 2017 in the west end to provide a better quality service and provide for future growth. The amount of the planned capital investment was $16.5 million including new feeders egressing from the station to the customers. In 2017, ENWIN judged that the cost of the station was not in keeping with ENWIN's values to provide its customers with an affordable distribution system and ENWIN indefinitely deferred the project

Walker 2 Reactors: In ENWIN's 2014 DSP, ENWIN planned to add bus tie reactors to its Walker 2 transformer station in order to accommodate addition distributed generation connections and the ability to accept the additional fault current that those connections provide. The reactors were planned for 2017 and were similar to that already provided by Hydro One in many of its stations serving ENWIN's distribution system for an estimated cost of $3 million. As well, while Hydro One typically provides a 5% reserve fault current capacity in its stations, ENWIN decided to forgo the reserve capacity and allow distributed generators to connect to Walker 2 feeders while pushing the ability of the station to accept fault current to 100% of the statutory maximum of 17kA. This has saved customers money by deferring the expenditure to the future. While ENWIN expects to reach the threshold of generator connections that will push the need for the reactor, ENWIN is deferring that expenditure into the latter years of this cost of service application forecast period and will try to defer the expenditure as much as possible.

Keith TS Wholesale Meters: ENWIN has had an obligation to comply with IESO wholesale metering requirements at the Keith TS and had originally planned to upgrade the meters in 2010. ENWIN had budgeted $410k in 2010 to install pole mounted PME wholesale meters on the feeders outside the station boundaries. After the government announced that a new bridge to the US would be build adjacent to the Keith TS, ENWIN put its plans to upgrade the Keith TS wholesale metering into abeyance and sought approval from the IESO for a deferral. This was done to avoid having to spend over $400,000 on a compliance item that would need to be abandoned and re-invested when the bridge work was finally done. This was done to save ratepayers money.

Wi-Max Communication System: In 2016-17 ENWIN commissioned a study to review communications technologies for our geographic area, trends in communications and to prepare a recommendation and cost estimate for a communication system that would support

ENWIN's "IoT" or Internet of Things, particularly remote devices and operations (i.e. remote operable switches, FCIs, meters, transfer trip, field data collection tablets, etc.). The study included leased, private network cellular, private spectrum radio, public spectrum radio and private spectrum Wi-Max. While the study had a recommendation for a Wi-Max system, that system was extremely expensive with 10-year combined capital and operating costs exceeding $7 million. At the same time as the study concluded, cellular pricing started to drop. ENWIN judged that it was in its customer's best interest to not commit to build a Wi-Max system but to deploy a combination of leased, private network cellular points and where there was a clear path, public spectrum radio (900 MHz). ENWIN continues to monitor communication system developments but has no large system capital spending plan for communications.

2 - SEC - 20

Reference:

Exhibit 2, Attach 2-A, Page 213-214

Question:

With respect to the risk matrix and benefits matrix:

a. Within each value, which have a weighting, there are in some instances multiple categories, how does the Applicant weigh the categories within a value?

b. How does the Applicant determine customer costs?

c. Is there a more detailed guide used internally? If so, please provide a copy.

d. Please explain how the likelihood of failure is determined.

Response:

a) Within each Value, there may be multiple Categories. For example, in the Financial Value, there are Categories for Customer Costs, Utility Costs, Fines/Penalties and Legal/Insurance. There are weightings across the Categories from Insignificant to Catastrophic. The PROSORT tool requires a numeric entry for each Value. In determining the risk score for a particular Value, the Applicant needs to consider the various Categories available within the Value. The one that is selected is the one with the highest risk score. Once that Category is selected then that remains the category within which the mitigations act to reduce the risk score.
b) ENWIN determines customer cost based on judgment. The categories are quite broad (>$1,000, <$100,000, <$1 million and >$1 million) so a reasonable differentiation can be made.
c) There is no more detailed guide for the use of the risk matrix.
d) The likelihood of failure is determined by judgment of ENWIN. That judgment is informed by incidents where the risk has occurred in the past.

2 - SEC - 21

Reference:

Exhibit 2, Attach 2-A, Page 213-2015, 311. With respect to the PROSORT tool:

Question:

a. How long has the Applicant been using this tool?

b. Since the Applicant begun to use the tool, for each year the Applicant has run the tool to prioritize projects, please provide a list of projects and the summary information (i.e. change of risk score, and CRPF).

c. For all 2019 and 2020 projects, please provide the full project information similar to provide in Table 76

d. How does the tool, if at all, ensure that projects that have a low overall risk, but low cost per unit of risk, are excluded from the prioritization?

Response:

a) ENWIN has been using the PROSORT tool since 2018.
b) Since ENWIN began using the PROSORT tool in 2018, the 2019 budget had been cast without the use of the tool and the only application of the tool thus far has been for the 2020 test year.
c) The full PROSORT project information for all material 2020 projects is provided in Appendix F – Material Investment Summaries in the section entitled, “Risks and Risk Mitigation”.
d) Please see the response to OEB Staff-62 (a).

2 - SEC - 22

Reference:

Exhibit 2, Attach 2-A, Appendix C, p.11. With respect to the Facilities Business Plan:

Question:

a. Who owned and had legal responsibility over the Ouellette Facility, the Applicant or the Water Utility Commission?

b. If the answer to part (a) is the Applicant, please explain why any portion of the gains on sale should be allocated to the Water Utility Commission.

c. Please explain why the Applicant is proposing to share the gains on sale 50-50 between shareholder and ratepayer.

d. The evidence is not sufficiently on what the specific renovations are to be undertaken to the 4545 Rhodes Drive. Please provide further details and detailed budget.

Response:

a) Prior to the enacting of the *Electricity Act, 1998*, the former Windsor Utilities Commission had legal responsibility over the Ouellette Facility. Pursuant to sections 142(2) and 145(1) of the *Act*, the LDC was corporatized and assets transferred. ENWIN has reported full ownership of this facility on financial statements since that time. The Windsor Utilities Commission may still appear on title, but ENWIN has legal responsibility since an approved asset transfer occurred under City Council and Windsor Utilities Commission resolutions.

b) Please see the response at OEB Staff – 122.

c) Please see the response at OEB Staff – 122.

d) Renovations will take place at the 4545 Rhodes Dr. and the 3665 Wyandotte St. East facilities. To date, the budget forecasts for 2019 and 2020 are based on a Class “C” estimate. Final design activities will culminate with a Class “B” estimate in August 2019, followed by construction tender pricing in late September 2019.

The 4545 Rhodes Dr. existing footprint is to be renovated to accept approxiamtely 100 office employees from the ENWIN Ouellette Facility, and to also sustain the approximately 200 current office and operational employees at that location.

Vacant space at 3665 Wyandotte St. East is to be renovated to accept the Ouellete Facility Server Room.

Based on the intended renovations and the Class "C" estimate, the following details and budget estimates are available:

4545 Rhodes Dr. – First Floor Renovations

- 45,276 sq. ft. total area
- 32,470 sq. ft. to be renovated (exsiting offices and shop areas to be renovated to house existing employee and functions and to create additional office spaces as well as a large meeting room to servce as a board room for ENWIN's Board of Directors)

4545 Rhodes Dr. – Second Floor Renovations

- 26,928 sq. ft. total area
- 15,101 sq. ft. to be renovated (exsiting offices areas to be renovated to house existing employee and functions and to create additional office spaces)

4545 Rhodes Dr. – Warehouse Renovations

- 27,712sq. ft. total area
- 7,732 sq. ft. to be renovated to accept relocation of existing operations shop areas on first floor to warehouse

3665 Wyandotte St. East – Server Room Renovations

- Server Room - 930 sq. ft. of vacant space to be renovated

The Class "C" estimate by ENWIN's preliminary design consultant from March 2018 was as follows:

4545 Rhodes Dr.		
First Floor Est.	$1,209,600	
Second Floor Est.	$626,400	
Warehouse Est.	$481,500	
Contingencies, allowances,overhead, profit, etc.	$1,052,100	
Soft Costs Est.	$636,000	
Est. Sub-Total		$4,005,600
3665 Wyandotte Str. East		
Server Room Est.	$350,100	
Soft Costs Est.	$65,300	
Est. Sub-Total		$415,400
Original Est. Total		$4,421,000
Estimated Deductions Due to Cost Containment Efforts to reduce Work on Second Floor		($800,000)
Revised Est. Total		$3,621,000

Since the original concept design in March of 2018, further design changes have occurred that are expected to reduce the renovation spends for the first floor and warehouse renovations at 4545 Rhodes Dr. It is anticipated that such design changes will further reduce the estimated project costs to be consistent with the Cost of Service estimate of $3,500,000.

Please also see the response to VECC – 14.

3 - SEC - 23

Reference:

Exhibit 3

Question:

Please provide a revised version of Appendix 2-H with 2019 year-to-date actuals.

Response:

The table below shows the June 30, 2019 year to date actual costs in a chart consistent with Appendix 2-H.

USoA #	USoA Description	Bridge Year[2]
		2019 YTD
	Reporting Basis	MIFRS
4235	**Specific Service Charges**	$ 314,427
4225	**Late Payment Charges**	$ 211,788
4082	**Retail Services Revenues**	
4210	Rent from Electric Property	$ 364,666
4215	Other Utility Operating income	$ 286
4245	Government Assistance Directly	$ 194,291
4310	Regulatory Credit	$ (1,366,041)
4355	Gain-Disposition of Util. & Other Prop	$ 55,413
4360	Loss-Disposition of Util. & Other Prop.	$ (148,166)
4375	Revenues from Non-Utility Operations	$ 11,558,676
4380	Expenses of Non-Utility Operations	$ (11,281,396)
4390	Miscellaneous Non-Operating income	$ 29,051
4398	Foreign Exchange G&L, incl. Amortization	$ 1,833
4405	Interest and Dividend Income	$ 441,240
Specific Service Charges		$ 314,427
Late Payment Charges		$ 211,788
Other Operating Revenues		$ 559,244
Other income or Deductions		$ (709,390)
Total		$ 376,068

Please note the Chapter 2 Appendices being filed with the responses to interrogatories is reporting the full 2019 Bridge Year and not year to date costs for Appendix 2-H.

4 - SEC - 24

Reference:

Exhibit 4, Page 8, Table 6-2

Question:

Please provide the underlying spreadsheet (with formulas intact) used to create Table 4-2.

Response:

ENWIN has attached the underlying spreadsheet used to create Table 4-2 in regards to Normalized OM&A Costs Compared to IPI.

Please refer to SEC 24 – Attachment 1.

4 - SEC - 25

Reference:

Exhibit 4

Question:

Please add a column to Appendix 2-JC for 2019 year to date actuals.

Response:

The chart below is consistent with Appendix 2-JC and contains the June 30, 2019 year to date actual costs.

Please note that the updated Chapter 2 Appendices including Appendix 2-JC have the full 2019 Bridge Year and do not contain year to date.

Appendix 2-JC
OM&A Programs Table

Programs	2019 Bridge Year YTD
Reporting Basis	MIFRS
Customer Focus	
Community Relations	67,922
Bad Debt	229,669
Customer Service & Billings	1,126,944
Customer Collections	57,152
Sub-Total	1,481,687
Operations and Maintenance	
Storms	51,675
Overhead Operations and Maintenance	1,037,959
Underground Operations and Maintenance	843,309
Station and MTS Maintenance	119,096
Tree Trimming Maintenance	591,909
Transformer Operations and Maintenance	73,231
Load Dispatching (SCADA)	167,301
Meter Operations	337,520
Control Room Operations	713,562
Engineering	844,942
Health and Safety Program	113,300
Sub-Total	4,893,804

Administrative and General	
General Plant and Vehicles	738,989
Insurance	230,453
Information Systems	764,251
Post employment costs (EFB)	1,401,534
Administrative & Human Resource Expenses	2,867,118
Sub-Total	6,002,344
Public and Regulatory Responsiveness	
Regulatory Affairs	192,338
Audit, Legal and Consulting	233,489
Sub-Total	425,826
Miscellaneous	38,504
Total	**12,842,165**

4 - SEC - 26

Reference:

Exhibit 4, Page 18, Table 4-9

Question:

Please explain why 'IFRS Change in Burden Rates – Rate' is a cost driver in any year after 2012, the year the Applicant adopted IFRS.

Response:

The required conversion from Canadian Generally Accepted Accounting Principles ('CGAAP') to International Financial Reporting Standards ('IFRS') resulted in material changes in financial reporting for Local Distribution Companies.

ENWIN converted to IFRS in 2012 and the impacts of that conversion were realized in 2012 and every period thereafter.

Specifically for this schedule, the 'IFRS Change in Burden Rates – Rate' line represents the impact of changes in the accounting standards as it relates to capitalization. Burden rates are allowed to be used to capture specific costs and apply them against capital projects but when the conversion to IFRS occurred, the amount that could be capitalized was more restrictive. That resulted in lower burden rates (amounts that could be capitalized for overhead costs) and those lower burden rates resulted in lower capital spending but higher operating costs. Costs that were previously eligible to be capitalized under CGAAP were no longer eligible for capitalization under IFRS and that left more costs to remain within the income statement compared to CGAAP.

4 - SEC - 27

Reference:

Exhibit 4, Page 35

Question:

The evidence states that the current collective agreement with the 'Hydro' bargaining unit ended on March 31, 2019. Please provide an update on the status of negotiations.

Response:

Please refer to the response provided to CCC-7.

4 - SEC - 28

Reference:

Exhibit 4, Page 43. Please revise Appendix 2-K to include the following:

Question:

a. Breakout of non-management into union and non-union FTEs;

b. Add a row to show the total amount of compensation costs in each year that are capitalized.

Response:

a) The below schedule reflects the breakdown of non-management into union and non-union FTE's.

	Last Rebasing Year - 2009-Board Approved	Last Rebasing Year - 2009-Actual	2010 Actuals	2011 Actuals	2012 Actuals	2013 Actuals	2014 Actuals	2015 Actuals	2016 Actuals	2017 Actuals	2018 Actuals	2019 Bridge Year	2020 Test Year
Non-Management union	28	32	26	27	28	33	32	32	35	35	31	34	35
Non-Management non-union	143	130	131	132	133	129	126	125	130	129	121	125	126
Total	171	162	157	159	161	162	158	157	165	164	152	159	161

b) Please refer to VECC - 27 for total amount of compensation costs in each year that are capitalized.

4 - SEC - 29

Reference:

Exhibit 4, Page 66

Question:

Are the 2020 regulatory rebasing costs that are to be recovered commencing in 2020, also included in the historical/bridge OM&A costs in Appendix 2-JA, 2-JB, and 2-JC.

Response:

Regulatory rebasing costs have been summarized in Board Appendix 2-M.

Those regulatory rebasing costs have been removed from the historical and bridge years within Appendix 2-JA, 2-JB and 2-JC. The amount proposed for recovery, which is 1/5 of the total regulatory rebasing costs has been added to those Appendices in the 2020 Test Year.

4 - SEC - 30

Reference:

Exhibit 4, Page 50. With respect to the relationship between the Applicant and its affiliates:

Question:

a. Please complete a version of the attached excel table for each of 2017, 2018, 2019 and 2020.

b. [Ex.4, Appendix K-O] Please detail all changes made to current shared services agreement with each of the Applicant's affiliates since 2009.

Response:

a) Excel tables for 2017 – 2020 have been attached isolating the shared services provided to each affiliate including ENWIN. Cost drivers have also been summarized in the table as well. Please see SEC 30 – Attachment 1.

b) The shared service agreements between ENWIN and the City of Windsor, ENWIN Energy Ltd. and Windsor Canada Utilities Ltd. have not changed since 2009.

   There was a new agreement signed between ENWIN and the Windsor Utilities Commission to operate the water system effective November 6, 2012. That agreement called 'Water System Operating Agreement' has been included in the application as Exhibit 4, Attachment 4-L.

4 - SEC - 31

Reference:

Exhibit 4, Page 62

Question:

Please revise 2020 PILS amount for the impact of Bill C-97. Please detail all changes made.

Response:

Please refer to the response provided in Interrogatory OEB Staff - 114.

5 - SEC - 32

Reference:

Exhibit 5

Question:

For each year between 2009 and 2019, please provide the Applicant's actual or forecast ROE and the Board's ROE parameter for that year.

Response:

Please refer to the response provided to OEB Staff - 6.

7 - SEC - 33

Reference:

Exhibit 7, Page 8

Question:

The Applicant proposes to eliminate two of its rate classes. Please provide a table showing the impacts in to all classes in a scenario where the Board does not approve eliminate of the two classes.

Response:

Please see the attached tables below. Note: The combined classes bill impacts tables are based on the versions of the Cost Allocation Model and Revenue Requirement Work Form filed as part of these interrogatory responses.

Customer distribution and bill impacts, combined classes:

Customer Class	kWh	kW	Distribution (Fixed & Volumetric)				Total Bill			
			Current 2019	Proposed 2020	$ Change	% Impact	Current 2019	Proposed 2020	$ Change	% Impact
Residential	750	-	$28.10	$28.07	($0.03)	-0.11%	$111.04	$110.82	($0.22)	-0.20%
General Service < 50 kW	2,000	-	$67.93	$63.67	($4.26)	-6.27%	$285.17	$279.76	($5.41)	-1.90%
General Service > 50 to 4,999 kW	65,000	200	$1,148.25	$1,122.67	($25.58)	-2.23%	$11,019.89	$10,566.26	($453.63)	-4.12%
Large Use 3TS	8,334,000	15,800	$79,946.72	$84,048.68	$4,101.96	5.13%	$1,232,815.46	$1,240,364.45	$7,548.99	0.61%
Large Use - Regular	4,323,000	7,900	$27,733.45	$21,716.37	($6,017.08)	-21.70%	$648,899.67	$616,947.30	($31,952.37)	-4.92%
Street Lighting	269,000	800	$73,451.43	$62,732.15	($10,719.28)	-14.59%	$122,779.04	$109,019.21	($13,759.83)	-11.21%
Sentinel Lighting	255	1	$24.90	$26.04	$1.14	4.58%	$58.34	$59.58	$1.24	2.13%
Unmetered Scattered Load	6,100	-	$249.55	$251.16	$1.61	0.65%	$981.04	$980.57	($0.47)	-0.05%

Customer distribution and bill impacts, uncombined classes:

Customer Class	kWh	kW	Distribution (Fixed & Volumetric)				Total Bill			
			Current 2019	Proposed 2020	$ Change	% Impact	Current 2019	Proposed 2020	$ Change	% Impact
Residential	750	-	$28.10	$27.80	($0.30)	-1.07%	$111.04	$110.54	($0.50)	-0.45%
General Service < 50 kW	2,000	-	$67.93	$62.21	($5.72)	-8.42%	$285.17	$278.22	($6.95)	-2.44%
General Service > 50 to 4,999 kW	65,000	200	$1,148.25	$1,163.71	$15.46	1.35%	$11,019.89	$10,611.73	($408.16)	-3.70%
General Service 3,000 to 4,999 kW	1,142,000	3600	$9,685.86	$7,232.02	($2,453.84)	-25.33%	$186,363.94	$172,226.19	($14,137.75)	-7.59%
Large Use 3TS	8,334,000	15,800	$79,946.72	$72,805.79	($7,140.93)	-8.93%	$1,232,815.46	$1,195,792.51	($37,022.95)	-3.00%
Large Use - Regular	4,323,000	7,900	$27,733.45	$21,436.23	($6,297.22)	-22.71%	$648,899.67	$616,632.52	($32,267.15)	-4.97%
Large Use - Ford Annex	3,784,000	6,200	$108,613.13	$104,635.01	($3,978.12)	-3.66%	$644,848.75	$635,096.17	($9,752.58)	-1.51%
Street Lighting	269,000	800	$73,451.43	$61,392.24	($12,059.19)	-16.42%	$122,779.04	$107,505.11	($15,273.93)	-12.44%
Sentinel Lighting	255	1	$24.90	$25.78	$0.88	3.53%	$58.34	$59.30	$0.96	1.65%
Unmetered Scattered Load	6,100	-	$249.55	$248.63	($0.92)	-0.37%	$981.04	$978.49	($2.55)	-0.26%

9 - SEC - 34

Reference:

Exhibit 9, 15. With respect to account 1508 – Other, the Productivity Initiatives Deferral Account established in the EB-2008-0227 proceeding.

Question:

a. Please provide a full breakdown of the $977,507 incurred.

b. For each external expert retained:

i. Please provide a copy of their retainer, terms of reference, work plan, or similar document.

ii. Please provide a copy of their final work product.

iii. Please explain how the Applicant implemented their advice and/or recommendations.

iv. Please provide the savings achieved as a result of the implementation of their advice and/or recommendation and a breakdown of how those savings are calculated.

c. Please explain how, if at all, the Applicant facilitated stakeholder involvement.

Response:

a) Please see below breakdown of the Productivity Initiatives Deferral Account balance of $977,507.

OEB 1508
Sub-Account: Productivity Initiatives Deferral Account

Vendor	Description	Year	Amount
Gartner	Energy & Utilities advisor IT Exec CIO	2013	$ 85,000
Gartner	Energy & Utilities advisor IT Exec CIO	2014	3,200
Gartner	Energy & Utilities advisor IT Exec CIO	2015	60,000
Gartner	Energy & Utilities advisor IT Exec CIO	2016	4,500
Stratejm	SIEM - cyber security information and event mgmt	2016	95,500
Stratejm	SIEM - cyber security information and event mgmt	2017	100,000
Stratejm	SIEM - cyber security information and event mgmt	2018	100,000
FMR	Future State Supervisor	2010	100,000
FMR	Stores and Supply Chain process	2012	60,106
FMR	Engineering & Operations Review	2014	15,447
Marjorie Richards & Assoc	Review and redesign of non executive compensation	2014	701
Optimus SBR Inc.	Operational Workforce Review	2011	52,122
Optimus SBR Inc.	Establishment of an Enterprise Project Mgmt Office	2012	39,894
Optimus SBR Inc.	Enterprise wide project management office training	2014	17,148
Optimus SBR Inc.	Compensation package review	2011	8,000
Optimus SBR Inc.	Exec leadership strategy workshop	2011	39,878
Optimus SBR Inc.	Succession planning and leadership coaching	2014	63,504
Springboard	Single Utility	2013	15,000
Springboard	Pain Point Improvement	2015	40,000
Principle balance			900,000
Carrying charges up to December 31, 2019			77,507
Total			$ 977,507

b) i. Please refer to attached documentation.

b) ii. Please refer to attached documentation.

b) iii and iv. – the following responses are organized by external contractor:

2013 - 2016 Gartner Energy & Utilities Advisor IT Exec CIO:

iii)

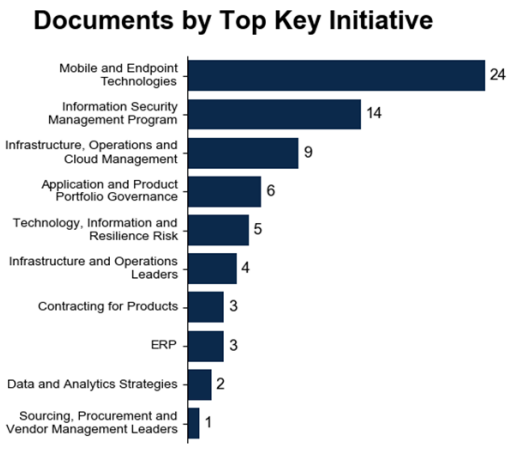
ENWIN realizes the importance technology plays in its ability to deliver energy services to its customers in an efficient and cost effective manner. By using Gartner advisory services, ENWIN

has achieved a number of productivity gains. It has reduced the time it takes to complete IT tasks, including market research, vendor and product evaluations and the development of IT processes to reduce operational and cyber risks. It has ensured optimal performance of its systems by reviewing emerging technology trends and implementing changes and tools prudently to keep ENWIN's infrastructure running with minimal risk and downtime. Access to research and toolkits also helped ENWIN fast track productivity projects such as mobility for field crews and cloud services for employee collaboration.

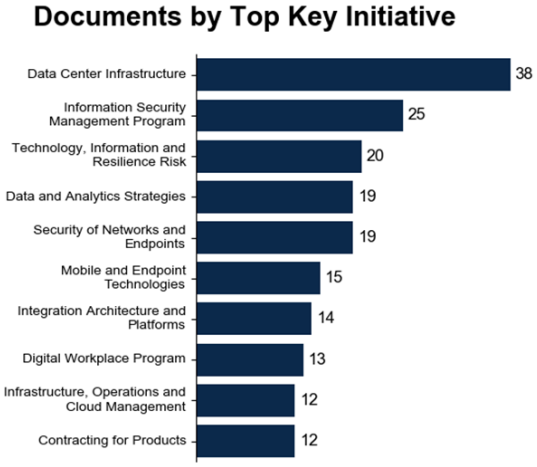
Gartner also provides contract optimization services which are key to assist ENWIN in evaluating and optimizing costs of IT contracts. The analytics, expertise and analyst guidance provided by Gartner helps ENWIN achieve the best possible terms by providing some insight into what other clients are able to negotiate with the specific vendors. This saves both time and money during the contract negotiation process.

The following graphs represent the key initiatives for which ENWIN sought Gartner advisory services.

2013



2015



The graph reproduced above represents a good view into the many initiatives where ENWIN sought Gartner advisory services. These typically represent productivity gains in many variations, such as streamlining of IT solutions, awareness of product offerings, discovery of industry best practices etc. Some of the specific discussions that were held between ENWIN and Gartner include: review of Microsoft enterprise licensing variations; review of potential audits to be conducted by Veritas, Microsoft and Oracle; review of virtual LAN (VLAN) corporate strategy, review of IT asset decommissioning policies; review of network performance measures.

iv.)

Yes, by streamlining IT operations, ENWIN was able to increase its system landscape, deliver great automation to employees and help achieve the goal of corporate-wide staff reduction.

2016-2018 Stratejm SIEM Cyber Security Information and Event Mgmnt & Pen Testing:

iii.)

As Cyber Security threats increased, it became apparent to ENWIN that existing in-house security resources and practices would not be sufficient to meet the future requirements. Development of in-house expertise and tools could take significant time and would not benefit from economies such as sharing of expertise and immediate access to advanced tools. ENWIN realized that short and long term risk could be minimized by using a partner to kick-start a security program and to complement and supplement internal functions. This partnership would be the best option not only from a cost perspective but from the productivity gains of having a partner that could quickly provide ENWIN with actionable items to improve its security posture. This included proactive planning, rapid detection and timely responses.

In 2016, ENWIN selected Stratejm as its' security partner and focus quickly turned to IT asset management. ENWIN's processes were manual which meant it was exposed to greater risk since it could not quickly and reliably identify which assets had security-related exposures or vulnerabilities. Stratejm helped ENWIN evaluate tools and implement both software and processes to automate the collection and analysis of the data. The asset management system also streamlined incident management, change management and release management processes. Productivity gains in this area allowed ENWIN to not replace a retiring IT staff member.

Vulnerabilities in systems can't be completely removed. Knowing what vulnerabilities exists, monitoring them and developing plans to eliminate, avoid or mitigate them all takes time and the threats are constantly changing. Stratejm was key in helping ENWIN select and implement tools that can efficiently respond to this changing landscape with minimal impact to staff.

ENWIN, like most companies, had been logging a wide range of IT-related activities, event and actions using logging tools on its network. The timely examination of these logs was not manageable in its current state, exposing ENWIN to unneeded risk. A Proof of Value project was started in which Stratejm, using advanced tools in their Security Operations Centre (SOC), collected the logs in real-time for off-line analysis and for correlating across multiple devices. Logs were reviewed around the clock so that threats could be dealt with as soon as possible. Using Stratejm's SOC proved very valuable not only in the productivity gains the IT staff experienced in no longer needing to perform this function but also in having the resource of the

SOC at their disposal. During a forensic analysis event, ENWIN was able to upload to a Stratejm sandbox a potential virus that had installed itself on an ENWIN device but had been blocked for further extraction. In the protected sandbox, Stratejm was able to dissect and provide ENWIN with remediation steps that could be quickly executed. The productivity gain of using Stratejm expertise and their sandbox allowed ENWIN to quickly isolate the virus and prevent its spread, saving a potentially catastrophic event.

Threat Intelligence is evidence-based knowledge about existing or emerging threats to assets. It acts as an early warning system that can be used to provide awareness and guidance to help prioritize remediation activities. A variety of Threat Intelligence is available, such as from the Canadian and US federal governments and industry sources. Accessing, filtering and applying this knowledge can be a significant and ongoing effort requiring specialized staff expertise and experience. These services depend on the availability of underlying resources including security specialists to establish, maintain and operate the security services, including the associated processes and tools, and to plan the responses to known threats. This would be unmanageable for ENWIN to perform on its' own. Stratejm SOC provides this service, greatly improving ENWIN's productivity.

iv.)

By being proactive and working with Stratejm, ENWIN has been able to better manage its cyber risks and avoid the costs and disruption caused by breaches while downsizing its IT staff.

2010 FMR Future State Supervisor Role:

iii.)

As a result of FMR's observation and analysis of the ENWIN circumstances, the design/build process and the roles assumed by Distribution Supervisors relative to it became the focus of many of the consultant's recommendations for specific process improvements. These included:

1. That the "interaction" between Engineering (design) and Operations (construction) be improved and enhanced to drive early design improvements that would reduce inefficiencies and construction "down time" due to numerous "ad hoc" design adjustments. Repeatedly altering designs "on the fly" was contributing to elevated construction costs as crews were idled or redeployed due to design changes made in the field at the time of construction.

2. That a collaborative process, leveraging the best attributes of Engineering and Distribution staff be established and formally adhered to and that each capital project expected to take more than two weeks to construct, be vetted through the process.

3. That staff be involved and lend their expertise to "non-traditional" portions of the design/build process to improve overall results (i.e. field personnel participate and offer suggestions to Engineering during the "design" phase and Engineering Techs attend regular site meetings in the field to continually review construction progress and anticipate and resolve any current or upcoming issues).

4. That the process has performance metrics attached to its significant elements and that both the number, content of meetings, design revisions and potential cost savings be estimated or captured and reported on.

5. That weekly progress reports outlining construction performance vs. budget and schedule be produced and provided to Supervisory personnel to allow for the provision of performance feedback and "course correction" in the event of undesirable results.

6. That the Distribution Supervisors be allowed to refocus their efforts toward ensuring more productive use of crew time through eliminating the need to "fire fight" and deal with daily changes to planned construction projects.

Following the presentation of their findings to the project steering committee, FMR assisted ENWIN in developing and establishing a methodology to address identified gaps in the design/construct process. Dubbed the "Collaborative Project Implementation Process", a summary of the process flow, roles and responsibilities and even the appropriate forms for tracking completion and content of each of the process stages. The process requires capital projects to be broken into phases, progressing from concept, through design, construction and finally to completion.

iv).

Throughout the process, the ENWIN Project Management Office (PMO) "provides support" in the form of:

1. Document control – all documentation related to the various stages of the process is submitted to the PMO for tabulation and review.

2. Performance metrics – the PMO assisted in the crystallization of measurement points and indices that are key to evaluating the health and success of the process.

3. Reporting – the PMO facilitates and documents monthly meetings aimed at assessing and reporting on the Collaborative Project Implementation process in addition to their preparation of weekly reports that track progress on significant capital construction projects.

4. Assistance with analysis of data and interpretation of trends.

5. Estimates of savings resulting from implementation of FMR process improvements.

c) Key to the concept and design phases is the formal requirement for "field personnel' (Manager of Distribution, Supervisor and construction crew Lead Hand) to participate in designing the project plan. Years of practical expertise are consequently drawn into the design at the earliest stages, allowing for elimination of unnecessary project elements, duplications, improper locations for plant and equipment and costly delays that were previously associated with idled crews awaiting ad hoc design changes during construction.

Distribution staff members are conversely sensitized to the myriad design concerns, technical considerations and regulatory compliance requirements faced by engineering staff when designing projects. Field personnel are consequently far less likely to make random or ill-advised field adjustments that previously resulted in costly reconstruction efforts in order to comply with design requirements. Changes are proposed, debated and documented during "Design Review" sessions and submitted to the Project Management Office (PMO) for collation and tracking. The number and frequency of meetings are reported to senior management in Engineering and Operations on a monthly basis.

Prior to breaking ground, a "Construction Readiness" meeting is also held with field personnel, Engineering staff and responsible management representatives who review the design and ensure satisfaction of all requirements prior to staff deployment. Material availability, confirmation of locates, easements, pole locations and contractor availability are all discussed and confirmed to avoid the historic last minute delays that idle construction staff. Again, the meeting and its outcomes are documented and tracked by the PMO.

At this point in the process, the "lead" role is assumed by the Distribution Supervisor. Tasked with leading Construction Reviews in the field that involve the crew Leader, Supervisor and Engineering Technician, regular gatherings (minimum of two per week) are conducted on site

during the construction process. Again, key to this phase of the process is the participation of the Engineering resource in regular interaction with the crew, allowing issues to be anticipated and addressed prior to the point of causing crew delays and lost productivity. These meetings, both their number and content, are tracked by the PMO and performance metrics are reviewed monthly with senior management.

Once construction has concluded, a post project review, complete with a detailed variance analysis for all projects having final costs greater than plus or minus ten percent of estimate, is conducted. Experiences and information from each project are to be vetted with the central goal being the improvement of the estimating and construction processes.

2012 FMR Stores and Supply Chain Process Review:

iii.)

The process review resulted in the identification of the top ten opportunities/recommendations:

- Reduction in obsolete inventory - annual review occurs with identification resulting in scrapping, liquidation or retention.
- Buying based on usage patterns - this is applied to reactive work inventory; planned project materials purchased based on detailed material lists from engineering.
- Kit material and stage for internal crews - engineering produces detailed material lists for all planned work for stores to kit in synch with project staging.
- Alignment of bill of materials with material pick - engineering produces bill of materials that prompts Stores to reserve, or to ensure that purchasing orders long lead time materials.
- Develop supply/build relationships with select contractors - has not been fully exercised due to purchase policy that limits length of relationship with contractors, and therefore ENWIN continues to order materials.
- Rationalize inventory levels - inventory levels reduced by approx. $1.46M or 22 % for the 2016 to 2018 time frame.
- End to end planning and scheduling that connects logistics, operations and engineering - a Planner Scheduler role creates, maintains and distributes an ongoing Hydro Planned Capital Project tracking summary to regularly apprise all involved functional areas of status and burn rates of all planned projects.
- Drop shipments to the site - limited success in this area, and with pole delivery only.
- Reduce waiting times at Stores window - has been significantly reduced because of internal kitting in advance of planned projects; reactive work material needs are filled by either crew truck stock or supply from Stores.

Reduction in Stores staffing requirements - has not been addressed; however Stores personnel are also deployed to Site and Facilities tasks to avoid that area from increasing FTE's.

iv.)

The specific savings have not been measured in all areas, but tangible gains have been realized in the following categories:

- Reduction in obsolete inventory values
- Material purchases are based on historical purchases for reactive work, and planned projects materials are ordered based on accurate bill of materials from engineering and long lead time materials are identified by engineering at the prelim. design stage; project lag time has been reduced.
- Overall inventory quantities reduced, and hence value on hand reduced.
- Resource burn rate and hence availability due to Project tracking summary provides view to resource efficiency and therefore improved resource utilization, project forecasting and completion.
- Material (poles) delivery to job sites eliminates Stores double handling costs for this category.

Kit assembly by Stores reduces wait time of crew staff each day which equates to increased wrench time in the field.

c) Functional group representatives from purchasing, stores, supervisory personnel and management assisted through interviews with the mapping of current practices, outputs and barriers to success, to create a gap analysis, and lastly assisted with the establishment of the objectives, procedures/measures/workflow and required roles to achieve the intended outcomes.

2014 FMR Engineering & Operations Review:

iii.)

This project occurred as a follow-up to the 2010 Future State Supervisor (Operations & Engineering Collaboration) and the 2012 Stores and Supply Chain initiatives to assess the work flow and processes from Capital Planning to Job Closure. Key checkpoints along the supply chain were identified and assessed looking at the then current Engineering and Operations interdependency and process compliance including Materials and reporting to Accounting.

Advice and recommendations from the audit performed by FMR resulted in the following administrative, engineering, stores and operational changes:

- Project planning improvement involving engineering, operations, stores and EPMO has been implemented.
- Expectations regarding project milestones are communicated from EPMO to operations crews.
- Pre-design meetings are now a procedural requirement involving engineering, operations field management and EPMO precede each capital and material maintenance projects.
- Pre-construction meetings are now a procedural requirement involving operations field management, and/or contractor personnel and EPMO precede each capital and material maintenance projects.
- Project key metrics are reported monthly by the EPMO Planner Scheduler role reflecting project status in terms of burn rate in all categories.
- Engineering design bank is used for soft jobs and jobs cancelled by the City, or unplanned jobs that are introduced.
- Annual resource availability is calculated to identify volume of controllable work time.
- Design and operations capacity estimates during budget forecasting stage assist in determining project capacity.
- EPMO creates and issues a master schedule that reflects full project life cycles.
- Monthly production meetings occur involving EPMO, operations supervision, finance and engineering,
- Design engineering firm has been engaged to assist with capital project design.
- USF engineering standards are being adopted on a gradual basis to reduce upkeep required by engineering.

iv.)

Specific savings have not been calculated, but examples of where tangible gains have been identified are as follows:

- Project tracking - the EPMO master schedule coupled with monthly production meetings identifies "reality" with respect to all project progress.
- Project engineering - the collaboration between engineering and operations at the pre-design and post design time frames have reduced early stage project re-engineering, as well as realizing alternative and economical design approaches.
- Field Crews - reduced wasted crew time due to getting the design right the first time instead of modifying on the fly.

- Stores - long lead time materials identified and ordered to satisfy project schedule and therefore more projects being completed on schedule; job kitting introduced with success on a small scale, but more work to do in this area.
- Third Party Engineering - consultant engaged to assist with approx. 25% of annual engineering requirements which directly offsets the need for increasing internal resources and assist with achieving annual project plan schedules.

c) Through all the initiatives the ENWIN stakeholder group (engineering, operations admin. and field staff, EPMO, stores and finance) were invited to review current state, assist with process and procedural revisions, and implement changes as designed.

2014 Marjorie Richards & Associates:

The consultant did the review of the salary market review and implementation of the new salary grid based on initiatives.

2011 Optimus SBR Inc. Operational Workshop Review:

iii.)

- Developed, implemented a 5 year corporate strategy that aligned all facets of the business - Single Utility Initiative
- Instituted a culture of change and promoted open communications to enhance organizational effectiveness and clarify roles - employee portal and wellness program; succession planning
- Identified core services and the base staffing levels necessary to ensure safe and reliable operations while maintaining desired levels of customer care - Single Utility Initiative
- Refreshed ENWIN's HR Strategy to align with the corporate strategy.
- Created and implemented a Talent Mgmt. Plan aligned with the corporate strategy that addresses recruitment, training, and retention of resources and core knowledge; advanced and implemented plans for the hiring of positions that required extensive training and apprenticeships
- Conducted a coordinated process review to discover and to systematically eliminate overlaps and redundancies, and to optimize productivity - mobility solutions, outage mapping and notifications, GIS mapping.
- Capitalized on cooperative educational programs with local institutions to leverage specific expertise and resource gap fill intermittently.

iv.)
Strictly speaking, the objectives of this initiative were not focused on achieving savings per se. The exercise was undertaken to prepare ENWIN for the inevitable retirements and the realities of the shortage of skilled and qualified workers against the back drop of a short time frame, industry changes and the changing resource culture. Facing the reality of retirements and associated challenges, this exercise identified a number of considerations and necessary alternative approaches, and opportunities that would not only address the pending work force impacts and that would also affect the resource and operations costing for the future.

c)
- Corporate Strategy - a five year Corp. Strat. is visited, refreshed, and approved annually by management and the Boards of Directors.
- Corporate Change and Open Communications - the Single Utility initiative was implemented resulting in resource reductions through attrition, process review and revision, strategic investment in automation, and the implementation of more robust culture of communication through training, key metrics, employee wellness program, employee portal, talent identification.
- Core Services and Base Staffing Levels - outsourcing opportunities in place in areas such as utility locates, engineering and design; overall staffing levels have been reduced over the past 5 years by approx. 14%.
- Human Resource Strategy - talent mgmt. and succession plan have been developed and is a living document; performance management and incentive program is in place.
- Corporate Metrics - in place and reviewed and approved by the Boards annually.

2012 Optimus SBR Inc. Establishment of Enterprise Project Management Office:

iii.)

ENWIN's established Project Management Office pre Optimus SBR engagement followed the foundational principles of the Project Management Body of Knowledge (PMBOK) however had not standardized across the enterprise foundational rules and tools for all corporate projects of any size. The consultant engagement was designed to identify gaps and areas of opportunity to enhance the project execution discipline and make specific recommendations for change that industry best practice has proven to avoid cost, schedule and scope overruns. ENWIN used the final report to fully document an Enterprise Project Management Office solution through a corporate System Level Procedure that has been in place since 2015.

iv.)
Over the 4 years following the implementation of their recommendations an estimated 100 projects, large and small, have moved through the execution phases governed by this procedure. Although immeasurable as to how much time and money has been avoided due to projects that may have otherwise experience scope, schedule or budget creep, anecdotally project success based on these 3 pillar parameters has been very good. Implementation of project management best practices is well documented as to the value it delivers to an enterprise in cost avoidance and overruns and from this it has been assumed that ENWIN experienced the best value for time and money through its various project implementations.

c) Implementation of the Enterprise Project Management Office methodology was designed and documented informed by a cross section of departments involved in project implementation (PMO, IT, Hydro and Water Operations). The solution was then put forward to senior management and was approved in concept in 2015 and formally documented in our Learning Management System in 2018 where all employees are trained and receive refresher training every two years.

2014 Optimus SBR Inc. Enterprise wide Project Management Office training:

iii.)

Following work done in 2012 to define and establish an Enterprise wide Project Management Office, Optimus SBR was engaged to develop and deliver EPMO training to ENWIN staff in the PMO, IT, Engineering, Finance and HR groups around the model established in the previous engagement. This training and the underlying EPMO methodology was applied to project work performed by this staff in the following years.

iv.)

Over the 4 years following the implementation of the EPMO and staff training an estimated 100 projects, large and small, have moved through the execution phases governed by this procedure. Although immeasurable as to how much time and money has been avoided due to projects that may have otherwise experience scope, schedule or budget creep, anecdotally project success based on these 3 pillar parameters has been very good. Implementation of project management best practices is well documented as to the value it delivers to an enterprise in cost avoidance and overruns and from this it has been assumed that ENWIN experienced the best value for time and money through its various project implementations.

c) The training modules developed were review by ENWIN management to ensure it was consistent with the EPMO methodology established in previous years.

2011 Optimus SBR Inc. Compensation Package Review:

iii.)

ENWIN implemented some of the recommendations from the report as follows:

- Increase the number of employees on four (4) day work weeks - during collective bargaining in 2012, language regarding 10 hour crews was negotiated in the Hydro Division collective agreement and has been implemented.
- Reduce sick leave entitlement for new employees - during collective bargaining in 2012, paid sick time for new employees was reduced from eighteen (18) days to ten (10) days in 2013.

2011 Optimus SBR Inc. Exec Leadership Strategy Workshop:

iii.)

A number of recommendations were implemented including:

- The implementation of CEO town hall meetings to build a culture of change and open communication to enhance organizational effectiveness
- The creation and implementation of a talent management plan aligned with the Company's strategy
- Collaboration and participation with local educational institutions for positions requiring apprenticeships and more extensive training
- Implementation of a corporate score card
- Changes to the organizational structure to eliminate overlap and redundancies

2014 Optimus SBR Inc. Succession planning and leadership coaching:

iii).

As an outcome of a corporate restructuring completed in 2012 that established clear lines of accountability through the elimination of redundant positions and changes to existing roles in

order to meet business requirements, a review and redesign of non-executive compensation was undertaken in 2014. Facilitated by a third party subject matter expert, this review based on the new corporate structure, ensured ENWIN was in compliance to Pay Equity legislation and the resulting redesign of the compensation program to maintain the ability to attract, retain, motivate and reward qualified employees while remaining cognizant of our fiscal responsibility to its rate payers was achieved.

2013 Springboard Single Utility:

iii.)

- Single Utility Communication Concept development - Employee Portal created and made accessible to all employees ; SUI promotional video displayed at Town Hall meeting in Sept 2013; power point presentation Sept 2013
- Strategic priorities framework visual creation, design and printing - displayed at numerous locations within all ENWIN buildings to promote and in support of the Single Utility Initiative.
- Communications staging - developed ghant chart for required 2013 activities and related time lines for creation and dissemination of promotional materials in support of the Single Utility Initiative.
- Motion graphic concept and content in support of the SUI, demonstrating the efficiency of a single party locating buried utility plant vs. two or more.

iv.)

This initiative was undertaken with Springboard to create materials to aid in the promotion of the Single Utility Initiative that resulted in the following:

- Strategic Framework poster
- SUI video

c) Stakeholders (employees and ENWIN Boards) were engaged throughout 2013 by means of Town Hall and other informational sessions to solicit support, approval and feedback.

2015 Springboard Pain Point Improvement:

iii.)

In 2014 ENWIN was driving a broad initiative to reduce cost and headcount and through deep analysis discovered several process inefficiencies and duplications of effort. There were two primary areas identified in our strategy road map that presented potentially harvestable savings associated with back office data entry as well as maintenance of asset information in our primary systems of record (GIS/CAD and SAP). The engagement with Springboard was intended to validate the harvestable elements associated with the various process improvement opportunities previously identified. The work product from this engagement was used to prioritize process and system changes with direct links to harvestable costs and headcount. Those changes implemented from 2015 through today include standardization of Work Order process flows, mobilization of work order management to point of use eliminating paper and rework as well as automated system audit of data quality where information resides in more than one system.

iv.)

Over the 4 years following the validation report, ENWIN has implemented several process, system and organizational changes and has been successful in reducing two back office clerical staff previously performing work that was discovered as inefficient and/or duplicate. The consolidation of back office clerical staff into a "pooled" Support Services function facilitated using common processes and tools within the business and management has been able to reduce the compliment of staff in this area by 1 in each of 2016 and 2017. Current Support Services staff are paid $28.80 per hour and applying a 40% overhead translates to $40.32 per hour cost for ENWIN. This is an annual savings of $167,731 per year.

c) Springboard's approach to the assignment included in depth interviews with all stakeholders as well as time studies associated with the process flows deployed at the time.

SERVICES AGREEMENT

This SERVICES AGREEMENT [the "**Agreement**"] is made to take effect as and from the 17th day of September, 2012.

ENWIN UTILITIES LTD.
a corporation incorporated under the laws of the Province of Ontario
with its Head Office located at 787 Ouellette Ave. Windsor, Ontario N9A 4J4
(hereafter "**ENWIN**")

-and-

OPTIMUS SBR INC.
a corporation incorporated under the laws of the Province of Ontario
with its Head Office at Suite 600, 30 Adelaide Street East, Toronto, Ontario, M5C 3G8
(hereafter the "**Consultant**").

NOW THEREFORE IN CONSIDERATION of the mutual covenants and promises set forth herein, and for other good and valuable consideration (the receipt and sufficiency of which is hereby acknowledged), the parties agree as follows:

ARTICLE 1
SERVICES

Section 1.1 Engagement. ENWIN engages Consultant to provide *Workforce Assessment Consulting Services*. The services to be provided (the "**Services**") are as described in the Statement of Work **"EnWin Workforce Assessment and Future State Analysis"** dated July 4th, 2012 [the **"SOW"**], which ENWIN has accepted. The Consultant shall provide the Services in conformity with the terms of the SOW accepted by ENWIN. The SOW is incorporated herein by reference and forms a part of this Agreement. The engagement of the Consultant is made on a non-exclusive and temporary basis.

Section 1.2 Provision of Services. The Consultant shall supply and assign to provide the Services such qualified persons, being employees or independent contractors of the Consultant [collectively the "**Personnel**"], who are described in the SOW or otherwise are reasonably acceptable to ENWIN, and who the Consultant warrants and represents have the training and expertise to professionally and properly provide the Services contemplated by this engagement. Consultant's Personnel shall meet with and receive direction and instruction from management personnel designated by ENWIN from time to time. Consultant shall retain full responsibility for disciplinary and termination matters relating to its Personnel. Consultant is not exclusively engaged by ENWIN and may provide similar service to other persons, organizations and entities. Services will be provided at ENWIN's Windsor offices unless otherwise agreed upon by ENWIN from time to time.

Section 1.3 Best Efforts. The Consultant shall use its best efforts to perform the Services in an orderly, efficient, skillful and professional manner through its Personnel. If the performance of any duty of the Consultant set forth in this Agreement is beyond the reasonable control of the Consultant, the Consultant shall nonetheless be obligated to:

(a) use its best efforts to perform such duty; and

(b) promptly notify ENWIN in writing that the performance of such duty is beyond its reasonable control.

Section 1.4 Performance Levels of Services. ENWIN reserves the right, in its sole discretion, to determine the acceptable levels of performance of the Services and to set specifications, boundaries, deadlines and benchmarks in respect of the provision of the Services. If the Consultant [including its assigned Personnel] do not perform the Services in accordance with the levels of performance reasonably established by ENWIN from time to time, ENWIN may on written notice terminate this Agreement without liability for further payment to the Consultant other than payment of Fees owing to the date of termination.

Section 1.5 Further Activities of the Consultant. In connection with the provision of the Services, the Consultant shall perform the following:

(a) if necessary to provide the Services, hire, retain, train and supervise at the Consultant's expense, and as employees of the Consultant and not as employees of ENWIN such competent Personnel as may be required to properly perform the Services and the Consultant's functions hereunder;

(b) the Consultant shall comply with all applicable laws, courts, codes, ordinances, rules, regulations, orders, permitting requirements, and directives ("**Legal Requirements**") of any federal, provincial or local governmental body, board, authority, department, agency or court pertaining to:

(i) provision of the Services, including providing any notices, registrations and filings required by any Legal Requirements, and

(ii) the Personnel engaged or employed by the Consultant;

(c) Provide ENWIN with evidence of Consultant's corporate existence, business and tax registrations, professional indemnity insurance, workers safety insurance coverage, registration of Consultant's business wherever required in respect to provision of the Services, and such other business related documents as ENWIN may from time to time reasonably request;

(d) Prior to performance of the Services and thereafter as may be reasonably requested, the Consultant shall deliver to ENWIN in respect of the Personnel proof of exemption from Worker's Safety Insurance Board coverage or proof of coverage as ENWIN may reasonably require;

(e) The Consultant shall take all reasonable safety precautions with respect to the provision of the Services by its Personnel and shall comply with all applicable Legal Requirements pertaining to the safety of persons and property and shall comply with any reasonable safety rules, measures or policies relating thereto (collectively, the "**Safety Requirements**"); and

(f) to maintain Consultant's own records and data as may be necessary to document and carry out the Services, as applicable.

ARTICLE 2
INDEMNIFICATION

Section 2.1 Indemnity. The Consultant (including all of those for whom it is responsible in law) shall indemnify and hold ENWIN, its owners, affiliates, agents, employees, officers, directors and representatives harmless from any and all liabilities, costs and expenses (including but not limited to reasonable legal fees) arising from:

(a) any breach by the Consultant of any of its representations, warranties, covenants and obligations under this Agreement;

(b) any negligent act or willful misconduct of the Consultant or those for whom the Consultant is in law responsible;

(c) any breach of privacy or confidentiality legislation

Section 2.2 Survival. The provisions of this Article 2 shall survive completion of the Services hereunder or any termination of this Agreement.

ARTICLE 3
COMPENSATION

Section 3.1 Compensation. As full compensation for the Consultant's Services hereunder, ENWIN will pay the Consultant the fixed fee of **$27,950.00** [including contingency and disbursements], plus any applicable HST or other value added tax thereon in respect of the provision of the Services by the Consultant.

Section 3.2 Invoicing & Payment The Consultant shall submit invoices to ENWIN on a monthly basis, in the form and manner stipulated from time to time by ENWIN. Invoices shall set out with sufficient particularity the Services relating to the invoice. ENWIN shall pay the Consultant within 45 days of receipt of an accurate and detailed invoice.

Section 3.3 Additional Services. In the event that ENWIN requires the Consultant to perform or furnish any service or work which falls outside the scope of the Services as set out in the SOW, the Consultant shall be entitled to receive such additional remuneration therefor as shall be mutually agreed between the Consultant and ENWIN, negotiated by the Parties promptly and in good faith, in writing in advance of the provision of any additional service. If the Consultant shall commence to perform any services or work which it believes may fall outside the scope of the Services herein to be performed without first reaching an agreement with ENWIN, ENWIN shall not be obligated to pay any additional fee or compensation to the Consultant for such additional services.

Section 3.4 Travel. ENWIN shall reimburse Consultant for reasonable travel expenses incurred by Consultant as required in the provision of the Services and as approved in writing in advance by ENWIN. Consultant shall include and particularize such travel expenses together with supporting documentation in the monthly invoice submitted to ENWIN.

ARTICLE 4
REPRESENTATIONS AND OBLIGATIONS OF THE CONSULTANT

Section 4.1 **Representations and Warranties**. The Consultant hereby represents and warrants that:

(a) The Services will be performed in a competent manner in accordance with the provisions of the SOW, applicable professional standards, the Legal Requirements and the Safety Requirements;

(b) The execution, delivery and performance of this Agreement will not constitute a breach or violation of any contract or agreement to which the Consultant or its directors or officers or principals or affiliates is a party or by which Consultant or its directors or officers or principals or affiliates are in any manner bound; and

(c) Consultant has obtained all required business permits, certificates and licenses including HST or similar account numbers.

Section 4.2 **No Rights to ENWIN Name**. The Consultant agrees that, without ENWIN's prior written approval, the Consultant shall not publish or engage in any advertising, sales promotion or publicity activity relating to the Services provided by the Consultant hereunder or otherwise, wherein the corporate or other business names utilized by ENWIN or any form or derivation thereof appears. The Consultant acknowledges and agrees that ENWIN has full ownership and control of all intellectual property rights associated with ENWIN's business name or any derivations thereof. The Consultant shall not market or advertise in any manner to suggest or imply any relationship with ENWIN other than having provided services in respect to the SOW.

Section 4.3 **Non-Solicitation**. The Consultant covenants and agrees that while providing the Services and at any time during the term of this Agreement and for a period of one (1) year thereafter, neither the Consultant nor its principals shall, on Consultant's behalf or for any third party, directly or indirectly, induce, entice, hire or attempt to hire or employ any employee or consultant employed or engaged by ENWIN and during the same period, neither the Consultant not its principals shall directly or indirectly solicit, induce or entice any client or supplier of ENWIN which is known to the Consultant to cease to do business with ENWIN or for any such client or supplier to enter into business arrangements with the Consultant on Consultant's own behalf or for any third party in respect to the provision of the Services.

Section 4.4 **Confidentiality, Non-Disclosure and Non-Use.** The Consultant acknowledges that, in connection with the Services, the Consultant will receive or have access to certain confidential business information of ENWIN, including but not limited to, information relating to the Services. For this purpose, "**Confidential Information**" shall mean all non-public information concerning ENWIN and the employees of ENWIN. Consultant agrees that it and its' Personnel will receive all such Confidential Information in trust to be used solely for the purposes contemplated by this Agreement and for no other purpose, and shall act as a fiduciary in respect to such Confidential Information.

Section 4.5 **Enforcement.** The Consultant acknowledges that any breach of Sections 4.2, 4.3 or 4.4 will cause ENWIN serious and irreparable injury that shall be difficult to adequately measure by monetary damages, rendering an award of monetary damages an inadequate remedy. The Consultant therefore agrees that, in the event of a breach or attempt of a breach or threatened breach of its obligations under this Agreement, ENWIN shall be entitled to obtain temporary and/or permanent injunctive or other

discretionary relief from any court or courts of competent jurisdiction, enforcing the terms of this Agreement, and shall not be required to post a bond or other form of security as a condition to seeking or obtaining any such relief. Such discretionary relief is in addition and not in substitution of any other remedies available at law to ENWIN.

Section 4.6 Ownership of IP. The Consultant acknowledges that ENWIN shall, as between ENWIN and the Consultant [including the Consultant's Personnel], own all right, title and interest in and to any proprietary or intellectual property rights in and to the Consultant's work product provided in connection with the Services under this Agreement. The Consultant hereby for itself and for its' Personnel irrevocably assigns and conveys to ENWIN all of the Consultant's and Personnel's right, title and interest including any intellectual or proprietary rights, whether now exiting or created in the future in and to such work product. The Consultant agrees to execute such documents evidencing ENWIN's ownership of the foregoing rights and work product, as may be reasonably requested by ENWIN from time to time.

Section 4.7 Insurance. Consultant will obtain and maintain the following, and deliver evidence thereof to ENWIN from time to time as may be reasonably requested:

(i) Worker's Compensation Insurance coverage in accordance with all statutory requirements;

(ii) Comprehensive general liability insurance (occurrence form) with minimal bodily injury limits of CDN $2,000,000.00 per occurrence and property damage limits of CDN $2,000,000.00 per each occurrence;

(iii) Professional Liability insurance in an amount reasonably approved by ENWIN.

The insurance requirements set forth above are to fully protect ENWIN from claims by third parties. The placement of insurance does not relieve or release the Consultant, its agents, sub-Consultants, employees and invitees from, or limit their liability to any and all obligations in this Agreement.

The Consultant and its insurer or any person or entity claiming by, through, under or on behalf of the Consultant shall have no claims, rights, causes of action or rights of subrogation against ENWIN or its officers, directors, employees or shareholders based on any risks, losses or liabilities insured against under the insurance coverage required under this Agreement.

ARTICLE 5
DURATION AND TERMINATION

Section 5.1 Term and Termination. This Agreement shall remain in effect for the period set forth in the SOW, and may be terminated earlier by either party for cause upon delivery of written notice to the other party. Consultant may terminate the provision of its Services under this Agreement upon delivery of written notice to ENWIN at least 30 days prior to the date of termination stated in the Notice, or upon the completion of the Services undertaken by the Consultant at the time of delivering such Notice, whichever date for termination is later. In addition, ENWIN may terminate the Services for convenience without any requirement for justification or explanation, and without further responsibility or liability to Consultant for any costs, expenses, or damages arising out of such early termination.

Section 5.2 Compensation upon Termination. Upon any termination, the Consultant shall be entitled to receive from ENWIN the unpaid amount of its compensation provided under this Agreement to the date of termination, provided that ENWIN shall have the right to offset against any payment owing to Consultant under this paragraph any damages, liabilities, costs or expenses suffered by ENWIN by reason of the negligent or willful act or omission or breach of the Consultant.

ARTICLE 6
GENERAL PROVISIONS

Section 6.1 Independent Consultant. In performing the Services hereunder, the Consultant is an independent contractor and not an employee, agent, joint venturer or partner of ENWIN. The parties confirm their intention to establish an independent consulting relationship only, and Consultant warrants and represents to ENWIN that Consultant is not dependent upon ENWIN for its income or business continuation.

Section 6.2 Ownership of Materials. The Consultant shall, upon completion of the Services or sooner termination of this Agreement, deliver to ENWIN all written data and information generated by or for ENWIN in connection with the Services or supplied to the Consultant by ENWIN or its agents and all drawings, plans, books, records, contracts, agreements and all other documents and writings in its possession relating to the Services, and ENWIN shall have the right to use same without further compensation to the Consultant. Such data and information and all such documents shall at all times be the property of ENWIN.

Section 6.3 Authority of the Consultant. The Consultant shall have no right or authority, express or implied, to commit or otherwise obligate ENWIN in any manner whatsoever.

Section 6.4 Taxes and Contributions. The Consultant assumes full and exclusive responsibility and liability for withholding and paying as may be required by law all federal and provincial taxes and contributions with respect to, assessed against or measured by the Consultant's compensation or salaries or other contributions or benefits paid or made available to any Personnel retained, employed or used by or for the Consultant in connection with the Services.. No Personnel shall be or be deemed to be an employee of ENWIN and Consultant fully indemnifies and saves harmless ENWIN in respect to any claims or amounts resulting from such designation or deeming.

Section 6.5 Severability. Each provision of this Agreement is intended to be severable. If any term or provision hereof shall be determined by a court of competent jurisdiction to be illegal or invalid for any reason whatsoever, such provision shall severed from this Agreement and shall not affect the validity of the remainder of this Agreement.

Section 6.6 Waiver; Consents. No consent or waiver, express or implied, by either party hereto to or of any breach or default by the other party in the performance by the other of its obligations hereunder shall be valid unless in writing, and no such consent or waiver shall be deemed or construed to be a consent or waive to or of any other breach or default in the performance by such other party of the same or any other obligations of such party hereunder. Failure on the part of either party to complain of any act or failure to act of the other party or to declare the other party in default, irrespective of how long such failure continues, shall not constitute a waiver by such party of its rights hereunder. The granting of any consent or approval in any one instance by or on behalf of ENWIN shall not be construed to waive or

limit the need for such consent in any other or subsequent instance.

Section 6.7 **Governing Law.** This Agreement shall be governed by the laws of the Province of Ontario.

Section 6.8 **Time of Essence.** Time is of the essence in the performance of this Agreement.

Section 6.9 **Assignment** This Agreement is not assignable.

Section 6.10 **Execution in Counterparts and Electronic Delivery.** This Agreement may be executed in counterparts, each of which shall constitute an original and both of which taken together shall constitute one and the same instrument. The parties contemplate and approve delivery of signed copies electronically [scanned pdf or fax transmission], and such documents electronically transmitted shall be deemed to be an original signed documents for all purposes.

TO WITNESS their agreement, the Parties have duly signed and delivered this Agreement to take effect as and from the date first set out above.

ENWIN UTILITIES LTD

Signature of Authorizing Officer

VICTORIA ZUBER, CFO
Print Name and Title
I have authority to bind the Corporation

OPTIMUS SBR INC.

Signature of Authorizing Officer

John Whincup, Executive Director
Print Name and Title
I have authority to bind the Corporation

OPTIMUS | SBR

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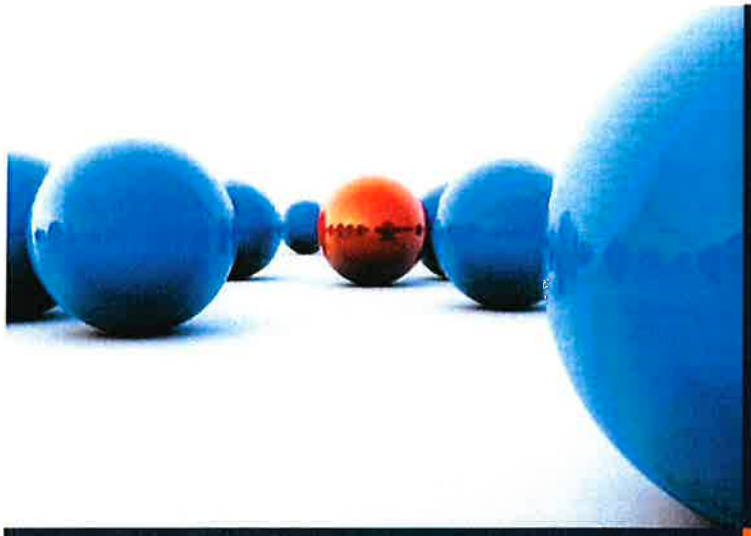

Statement of Work

EnWin Workforce Assessment and Future State Analysis

July 4, 2012

CHOICE TOOLS. PRECISION AIM. BOLD ATTITUDE.

Quotation Number | EUL05-120411

Quotation Contact: Steve Klein
Vice President & Practice Manager
Energy and Infrastructure
P: (416) 649-6016
E: steve.klein@OptimusSbr.com

Prepared for:
Michael McKinnon
Director, Organizational Development

ENWIN UTILITIES

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1.0 EXECUTIVE SUMMARY

EnWin leadership has recently directed much effort in formulating its Strategic Plan for the next 3+ years giving rise to a series of strategic actions which now need to be put into motion on a prioritized basis. One of the more significant tasks identified is the need to align EnWin's Human Resources with its Strategic Plan. While EnWin leadership in conjunction with the Human Resources department have begun to address this sizeable undertaking, senior executive have recognized the need for external support in order to effectively work through the numerous components of this exercise in a timely and progressive manner.

This Statement of Work represents the first of two phases which will be undertaken over the next year with the assistance of OPTIMUS | SBR to build on the work already done by EnWin in the areas of Talent Management and Succession Planning. This initial phase focuses on a current state assessment and gap analysis to identify issues and human resource needs to meet current/near-term and currently known future state organizational requirements, particularly as relates to mission critical and key operational positions.

The future state in this phase would embrace the possibility of a more integrated one-utility model i.e. EnWin Utilities and Windsor Utility Commission (WUC) combined, hereinafter referred to as EnWin. A second phase could then be possible wherein a series of scenarios could be developed to ascertain the potential additional human resources impacts associated with various potential strategic initiatives currently under consideration (e.g. Shared Services model with the City of Windsor, etc.)

2.0 MISSION

To build/update a comprehensive workforce registry reflecting eligible, known (planned) and anticipated retirements, other projected staff departures, known hires (if any), and the most recent performance and potential assessments for all EnWin personnel. In conjunction with this, working with EnWin leadership mission critical and key operational positions will be identified.

This engagement will build upon the workforce analysis previously completed by OPTIMUS | SBR and the internal work done by EnWin over the past several months as outlined in the Action Item listing "*The 2011 EnWin Succession Planning Program Implementation*" (Appendix A), specifically Items #2 through #5. The outcome of this current state review and gap analysis will identify the issues and human resource needs to meet the ongoing requirements of the organization over the next 4 years (to 2016), particularly relative to key operational positions.

3.0 TIMELINES

The estimated duration of the project is approximately six (6) weeks beginning on or about July 16, 2012, with an anticipated completion date prior to the end of August , 2012 (timing can be changed based on EnWin's needs).

4.0 PROJECT SUCCESS

A successful project will deliver the following results at the close of the engagement:

- An understanding of the current state workforce, including skills and near term potential of the existing base of human resources
- An inventory of the projected EnWin workforce by 2016 fiscal year-end
- An outline of EnWin's ability to maintain current customer service and business operations levels over the next four years given the impact of an anticipated smaller workforce
- An evidence-based report which can in part be drawn upon to support business decisions and interactions with shareholders, industry regulators, and community stakeholders
- Provide the basis for a more comprehensive recruitment plan to address identified gaps/shortcomings particularly associated with mission critical and key operational positions

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- Provide the basis and approach for the planned Phase Two without undue overlap or duplication of effort

5.0 PLANNED APPROACH

Our approach is integral, comprehensive and consultative. Stakeholder engagement is a fundamental component of our review process. The focus is on identifying hydro utility workforce requirements to ensure current customer support levels and established operations levels are at least maintained, over the ensuing four years ending 2016.

Efforts will include:

Step 1 – Project Launch and Planning

- This will involve the OPTIMUS | SBR team confirming with EnWin stakeholders the scope and scale of the project. The initial kick-off meeting will involve formalization of project milestones and key deliverables.

Step 2 – Discovery and Current State Human Resources / Skills Review

- Receive internal documentation necessary to conduct a comprehensive assessment of the current human resources base of EnWin. This will include capturing all organization charts, position descriptions, documented performance levels, individual potential assessments, and a skills inventory.
- Required EnWin documentation will, in part, also include the earlier workforce analysis carried out by OPTIMUS | SBR and any documentation prepared by EnWin through its internal work in this area.

Step 3 – Future State (2016) Organization

- This will involve 3 or 4 stakeholder interviews and capturing known operational changes in order to map out the anticipated 2016 year-end organizational requirements for EnWin.
- During this step, mission critical and key operational positions will be identified.

Step 4 – Human Resources / Skills Gap Analysis

- Working with EnWin stakeholders, a SWOT analysis will be conducted identifying Strengths, Weaknesses, Opportunities and Threats (Risks) when comparing the Human Resources inventory/assessment and the requirements to at least maintain EnWin operations and customer services levels during the 4-year study period ending 2016.
- Primary focus will be on mission critical and key operational positions.

Step 5 – Final Report and Recommendations

- The project and its key findings including the methodology, current resource base assessment and future state operations definition, human resources skills and gap analysis will be assembled and delivered to the project sponsor.
- Recommendations to assist leadership in moving forward with EnWin's overall talent management plans will also be provided once reviewed and agreed by the project sponsor.
- An executive presentation will outline key findings for senior management to establish buy-in to next steps and to facilitate apprising key internal and external stakeholders.

6.0 DELIVERABLES

- ***Workforce Assessment Report*** – A fact-based registry of the current workforce, reflecting: eligible, known and anticipated retirements; other potential human resource departures; known hires (if any); most recent documented performance ratings, and potential assessments

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- ***Future State (2016) Organizational Requirements*** – An probable EnWin organization chart representing the planned structure as at fiscal 2016 year-end, identifying mission critical/key positions
- ***Final Report and Executive Presentation*** – A report summarizing the project and its key findings and recommendations to assist leadership in moving forward with EnWin's overall talent management plans. The executive presentation will outline key findings to facilitate apprising key internal and external stakeholders

Note: Throughout the development of deliverables, approval will be sought from Project Sponsor

7.0 RESOURCES

On average 1.5 full-time equivalent (FTE) resources will be deployed by OPTIMUS | SBR at EnWin's preferred-client blended rate of $1,300 per FTE day and will include the efforts of the following:

- John Whincup – Advisor and Executive Liaison
- Steve Klein – Practice Lead and Project Oversight
- Nick Mirkovic – Project Manager
- Mark Hodgson – Business Analyst

Additional resources may be drawn from the OPTIMUS | SBR talent pool as deemed necessary by the Practice Lead.

8.0 BUDGET

- Total cost fixed at $27,950 + approved disbursements + HST.
- Disbursements, at cost, most likely will be associated with travel to and accommodation in Windsor as resources will be drawn from our Toronto talent pool.
- Total Work Effort is projected to be 21.5 FTE days over a six (6) week period.
- This Work Effort has been set based on the extent of work done by EnWin as stated by the project sponsor; if it is found during Project Launch (Step 1 above) that there is more Work Effort required, this will be revisited with the sponsor and, if necessary, the Work Effort and associated Price reset by way of written approval from EnWin.
- Payment terms: Invoiced Monthly based on Percentage Completed.
- Standard OPTIMUS | SBR General Terms and Conditions apply or EnWin contract/PO/work order (where non-conflicting, OPTIMUS | SBR terms apply).
- OPTIMUS | SBR will request written approval from EnWin prior to any project scope or pricing changes.
- If additional requirements emerge necessitating mutually-agreed work, a pro rata extension can be provided ad hoc and normally within 24 hours.
- Any added or follow-on work will be confirmed by written amendment(s) to this proposal, signed by both parties.

9.0 ASSUMPTIONS

- The documentation and/or reports developed by EnWin in completing Action Items #2 through #5, as referenced in Section 2.0 above and outlined in Appendix A, are sufficiently detailed to minimize extensive rework and fact-finding
- Any other pertinent documentation for this project , such as current organization charts, position descriptions, staff listings, details of known near-term hires, etc. is readily available for review / deployment by the project team
- EnWin staff and stakeholders will be available for interviews if, and as necessary
- Working sessions and directional resets as required will be arranged in advance
- Key stakeholders briefed in advance and prepared to participate in meetings and workshops

- Scheduled meetings will not be cancelled or rescheduled to later dates

10.0 WORKSITE DETAILS

- OPTIMUS | SBR staff will work both on- and off-site based on circumstance or need.

11.0 REPORTING

- Once-weekly progress touch-base meetings with Sponsor (or delegate) will be held either in person or by way of telephone/video conference call to ensure progress towards completion remains on track, and that target delivery is reachable within defined project scope.

OPTIMUS | SBR

RE: EnWin Workforce Assessment and Future State Analysis

Authorized by OPTIMUS SBR INC.

Signature	July 4, 2012 Date
John Whincup Name	Executive Director Title

Accepted by EnWin Utilities Ltd.

Signature	Date
Name	Title

12.0 APPENDICES

APPENDIX A **– THE 2011 ENWIN SUCCESSION PLANNING PROGRAM IMPLEMENTATION, ACTION ITEM LISTING**

Time Line - as of August 1, 2011

The 2011 ENWIN Succession Planning Program Implementation

	Priority (H, M, L)	Action Item	Resp.	Start Date	Status % Complete	Target End Date	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Apr-12	May-12	2012 +	Comments
#1	H	Communicate Organizational Goals and Objectives - Define Long-term Business Strategy	Max, Mike, John Stuart, Gregg					Review with Max												
		Role out of Succession Plan Model																		
#2	H	Update line of site analysis of the potential for current employees for the promotion to supervisory positions through to the positon of VP.	Mike, Gregg, VPs & Directors	Sep-11	100%	Nov-11				●	—	●								
		Identification of Key/Critical positions																		
#3	H	1. Update analysis of retirement information through a report to the Governance Committee of the Board. 2. This report is the first step in analyzing the depth of our organization with respect to our ability to draw on internal resources to fill the void of employee skill and experience that will be created by loss of an employee from the organization with the most pending reason the significant turnover of employees through retirement. 3. Identify immediate hot spots/occupations of concern. 4.How much time we have to deal with replacement or reorganization.	Mike, Gregg, John Stuart	Sep-11	100%	Nov-11				●	—	●								
#4	H	Perform gap analysis and assess impact on Startegic Plan and ability to fulfill business needs in a timely manner.	Max, Mike, John Stuart, Gregg	Sep-11	70%	Dec-11				●	—	—	●							After step 4 the following broad based action steps 6 - 10 will be reviewed, reassessed and prioritzed.
#5	H	Identify business units where relatively large numbers of incumbents are eligible to retire and examine intent to retire or leave.	Mike, John Stuart, Gregg	Sep-11	100%	Nov-11				●	—	●								
		Identified Workforce Developmental needs																		
#6	M	• Identify required skill sets for recruitment, replacement or reorganization. • Analyze and report on recruitment and retention issues for electricity sector and projected completion for professional and skilled trades within sector. •Determine need for strategy by group or job classification. **(Not all positions can or should be identified as critical from a succession planning perspective.)**	HR/ Directors	Jan-12	[redacted]	May-12								●	—	—	—	●		
#7	M	Identify the management leadership attributes, skills and experiences essential for success in the effective execution of the business strategy.	HR/Directors					Review with Max												
#8	H	Develop a methodology tool to measure and assess the degree to which prospective candidates possess the required competencies essential to the effective execution of the business startegy.	HR/Directors					Review with Max (Budget? Buy in?)												
#9	M	Role out pilot for 1st line supervisor preparatory college/university courses.	HR/Directors	Dec-10	100%	Dec-10														
#10	M	Identify the gaps between the required and actual competencies for each prospective candidate and create an individual training plan to develop and enhance the required competencies.	HR/Directors	Jan-12	[redacted]	Mar-12								●	—	●				
#11	M	Identify internal candidates who have been confirmed as suitable successors to positions requiring re-placement	HR	Jan-12	[redacted]	Feb-12								●	●					
#12	M	Develop an action plan for the above candidates to assume the targeted positions identified in plan	HR/Directors	Feb-12	[redacted]	Mar-12									●	—	●			
#13	M	Identify anticipated vacancies over the next 3, 5 years, and 10 years requiring re-placement through external resources	HR/Directors	Sep-11	[redacted]	Nov-11				●	—	●								

Time Line - as of August 1, 2011

The 2011 ENWIN Succession Planning Program Implementation

	Priority (H, M, L)	Action Item	Resp.	Start Date	Status % Complete	Target End Date	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Apr-12	May-12	2012 +	Comments
#14	M	Develop an action plan with external resources to acquire required talent for anticipated vacancies	HR	Jun-12		Ongoing													→	
		Training & Development																		
#15	M	Review shared training available with other LDC's, external providers etc.	HR	Mar-12		Jun-12										→	→	→		
#16	M	Identify employees for advancement who would benefit from identified career training and development (Look at TAPD Program as a tool)	HR/Directors	Jun-12		Ongoing													→	
		Determining workforce trends and predictions																		
#17	M	Review electricity sector labour market context and means toward building workforce capacity	HR	Jan-12		Mar-12								→	→	→				
#18	M	Creatively market industry to local community/colleges and universities of various occupations and career options	HR/Directors	Jan-12		Mar-12								→	→	→				
#19	M	Analyse Recruitment & Retention priorities for the industry	HR	Jan-12		Mar-12								→	→	→				
#20	M	Develop any required recruitment strategies	HR	Jan-12		Mar-12								→	→	→				
		Mentoring / Job Shadowing / Coaching / Leadership Development																		
#21	M	Creatively utilize the skills and abilities of current staff to react to our quickly changing environment and demographic landscape	HR/Hydro Operations Pilot		100%															
		Employee Retention																		
#22	M	Implement internal marketing of career opportunities including self identification process	HR/ Communications	Jan-12		Mar-12								→	→	→				
#23	M	Strategies and incentives to retain employees	HR/ Benefit Consultant	Jan-12		Mar-12								→	→	→				
#24	M	Maintain market competitive salary and wage rates for identified occupations of concern.	HR		90%															
		Employee Satisfaction																		
#25	M	Proceed with University of Windsor study/survey of Enwin employees on social skills, cutural values in the workplace which can used to develop training programs	HR	Sep-11		Dec-11				→	→	→	→							
		Monitor and Evaluate Succesion Management Plan																		
#26	M	Implement various methods of formal & informal methods of reporting and monitoring progrees of departmental plans	HR	Jun-12		Ongoing													→	

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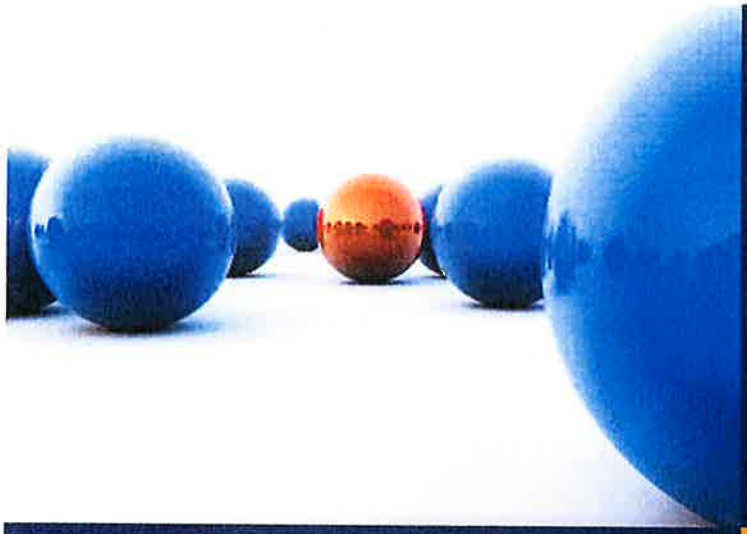

ENWIN Utilities Ltd.

Executive Leadership Strategy Workshop

September 8th, 2011

CHOICE TOOLS. PRECISION AIM. BOLD ATTITUDE.

Quotation Number | EUL02-110907

Prepared for:
Victoria Zuber,
Vice President of Finance & CFO

ENWIN UTILITIES

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1.0 EXECUTIVE SUMMARY

1.1 MISSION

ENWIN Utilities Ltd. (ENWIN) leadership has identified the need to move forward with the development of a Strategic Plan with focus on near-term priorities. This plan will identify operating and environmental issues, workforce concerns, Ontario Energy Board (OEB) challenges, and additional factors as discovered.

OPTIMUS | SBR is proposing to assist ENWIN develop a Hydro strategy framework by leveraging components of our well-reputed and highly successful Accountability Framework® System. The Accountability Framework® System is fully explained in Section 6.0. This will be conducted through a one-and-a-half day Executive Workshop designed to align senior leadership and solidify ENWIN's Vision and high-level strategy.

1.2 TIMELINES

The estimated duration of the project is approximately six weeks with initial activities to begin on or about September 12, 2011. The anticipated completion date with final deliverable and debrief is October 25, 2011 (timing can be changed based on ENWIN needs).

The timing for the one-and-a half day Executive Workshop session, to be held at OPTIMUS | SBR's Toronto Office is expected to be as follows:

Day One Morning Session – Thursday, October 13, 2011 8:30am-12:00pm
Day One Afternoon Session – Thursday, October 13, 2011 1:00pm-5:00pm
Day Two Morning Session – Friday, October 14, 2011 8:30am-12:00pm

1.3 PROJECT SUCCESS

A successful project will deliver the following results at the close of the engagement:

- Increased awareness among ENWIN Executives of the operating and strategic planning environment
- Understanding among ENWIN Executive leadership of the main success factors of the organization
- Executive commitment for a formalized strategic plan and associated accountabilities
- Leadership alignment towards the specific next steps to move the high-level plan forward to execution
- Agreed upon plan to secure key stakeholder and Board buy-in

1.4 PLANNED APPROACH

Our approach is integral, comprehensive and consultative. The focus is on identifying the priorities of ENWIN's strategic planning requirements and the key areas to focus on during the development of a strategy plan framework & future action plan..

Efforts will include:

Step 1 – Project launch
Step 2 – Discovery and Information Scan
Step 3 – Workshop Preparation
Step 4 – Facilitated Workshop for ENWIN Executives (Developing the Accountability Framework®)*
Step 5 – Final Report and Project Closeout

Note: The Accountability Framework® System and the various modules which compose it are fully explained in Section 6.0.

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1.5 DELIVERABLES

- ***Discussion Document*** – Document developed through a series of stakeholder interviews and/or surveys with senior executives and Board Members to identify current operating and environmental issues, workforce issues, Ontario Energy Board challenges, other regulatory and organizational priorities. Additionally OPTIMUS | SBR's experience with industry best practices will be leveraged to further develop areas of study. The Discussion Document will identify key factors which may be focused upon during the Facilitated Workshop.
- ***Accountability Framework®*** – Graphical representation solidifying ENWIN's Vision, how to achieve results, leadership alignment, and a high-level strategy and framework to build the strategic plan.
- ***Facilitated Workshop and Summary*** – Summary of the notes and findings documented during the one-and-a-half day facilitated workshop to be conducted from Thursday, October 13 to Friday, October 14, 2011 in the offices of OPTIMUS | SBR.
- ***Final Report*** – An evidence-based report recording the outcomes from the workshop and the overarching strategies and key priorities. To be developed in the context of ENWIN's strategic pillars.

Note: Throughout the development of deliverables, approval will be sought from project sponsor

1.6 RESOURCES

The following resources will be deployed to this engagement with ENWIN:

- Project Lead and Workshop Facilitator – John D. Whincup
- Subject Matter Expert and Co-facilitator – Steve Klein

1.7 BUDGET

- Total cost fixed at preferred client discount of 10% is $24,750 + approved disbursements if any + HST.
- Total Effort is estimated as 16 consulting days over a six week period
- Payment terms: Invoice Monthly based on Percentage Completed
- Standard OPTIMUS | SBR General Terms and Conditions apply or ENWIN contract/PO/work order (where non-conflicting, OPTIMUS | SBR terms apply).
- OPTIMUS | SBR will request written approval from ENWIN prior to any project scope or pricing changes.
- If additional requirements emerge necessitating mutually-agreed work, a pro rata extension can be provided ad hoc and normally within 24 hours.
- Any added or follow-on work will be confirmed by written amendment(s) to this proposal, signed by both parties.

1.8 ASSUMPTIONS

- ENWIN stakeholders will be available for interviews if and as necessary, with any working sessions and directional resets as required arranged in advance. Key stakeholders briefed in advance and are prepared to participate.
- Corporate and operational documentation pertinent to the project will be readily available to project staff as necessary.
- Scheduled Meetings will not be cancelled or rescheduled to later dates.

1.9 WORKSITE DETAILS

- OPTIMUS | SBR staff will work on- and off-site based on circumstance or need.

1.10 REPORTING

- Frequent interactions and communication with Sponsor (or delegate) will ensure progress towards completion remains on track, and that target delivery is reachable within defined project scope.

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RE: ENWIN UTILITIES LTD. EXECUTIVE LEADERSHIP STRATEGY WORKSHOP

Authorized by OPTIMUS SBR Inc.

Signature	September 8, 2011 Date
John D. Whincup Name	Executive Director Title

Accepted by ENWIN Utilities Ltd.

Signature	Sept. 12, 2011 Date
VICTORIA ZUBER Name	CFO VP FINANCE Title

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2.0 CONTEXT OF THE ENGAGEMENT

ENWIN Utilities Ltd. (ENWIN) is the Local Distribution Company responsible for the distribution of electricity and maintenance and service of electrical infrastructure within the Windsor area. ENWIN is further responsible for providing fleet, billing, collections, credit, financial services, human resources, customer service, and information technology services to Windsor Utilities Commission and the City of Windsor.

Recent years have been some of the more difficult economically which has significantly impacted the Windsor area. Led by a change in operations of major manufacturing customers, the struggling local community has placed increased challenges on ENWIN as the utility has experienced reduced demand for its energy and electrical services while having to play a more significant role in implementing positive change within Windsor and the surrounding area.

In addition to this the Utility and Energy sector is undergoing rapid transformations involving all aspects of the industry including: environmental issues, shifts in public perception, workforce requirements and labour issues, Ontario Energy Board (OEB) challenges, and technological developments, such as Time of Use billing, Smart Grid initiatives, and alternative energy sources. Consequently it is critical that the senior leadership of Ontario Local Distribution Companies (LDCs) have a thorough understanding of objectives, Mission, Vision and Values, operating environment, and priorities which inform the organizations' Strategic Plan.

OPTIMUS | SBR is proposing to facilitate a one-and-a-half (1.5) day workshop with ENWIN leadership for the purpose of creating the overarching strategies and near-term priorities for the Hydro Utility. The workshop and supporting activities will develop key success factors, leadership alignment and next steps to secure Board and key stakeholder buy-in to move the development of a strategic plan to the next phase.

OPTIMUS | SBR is well experienced at developing organizational strategies and facilitating Senior Leadership sessions for leading Ontario utilities and public sector organizations. OPTIMUS | SBR's experience and best practices facilitating workshops and developing strategic plans and initiatives within the Energy Sector have been gained through partnerships with current and past clients including:

- Ontario Ministry of Energy
- Ontario Power Authority
- Ontario Hydro
- Ontario Power Generation
- Hydro One Networks Inc.
- Toronto Hydro Corporation
- Veridian Corporation
- PowerStream Inc.
- Enbridge Gas Distribution
- Enersource
- Atomic Energy of Canada Limited
- Canadian Electricity Association
- EDA/Mearie Group
- Horizon Utilities

To guide the development of strategies and priorities OPTIMUS | SBR will leverage elements of its highly successful and trademarked Accountability Framework® System (AFS). This system is fully explained in Section 6.0 below. For this engagement OPTIMUS | SBR will leverage the first module – The Accountability Framework®. Through the facilitated workshop we will work with senior leadership to develop a straightforward construct that confirms ENWIN's organizational Vision and identifies key Success Factors, including definitions, which will be used to focus all organizational and individual effort and to measure future progress and strategic drivers. This workshop will align leadership and establish a firm commitment to formalize strategic actions and associated accountabilities to move the plan to corporate-wide execution.

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3.0 OBJECTIVES

TIER 1

- To prepare a discussion document as a foundation for the senior leadership workshop.
- To develop an accurate understanding of the focus, specific view, and priorities of ENWIN held by senior executives and Board Members.
- To prepare and deliver a co-facilitated workshop leveraging OPTIMUS | SBR's Accountability Framework® System.
- To develop, present, and debrief a report detailing the outcomes of the workshop, high-level strategic framework and proposed next steps.
- To plan the optimal approach to attain stakeholder and Board buy-in to the strategic framework.

TIER 2

- To ensure that project efforts do not interfere with existing ENWIN business operations.
- To ensure a continuous transfer of knowledge to ENWIN staff on tools, techniques and general methodology.
- To offer a fresh, objective perspective untainted by internal biases or hidden agendas.

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4.0 PROJECT APPROACH

OPTIMUS | SBR will leverage its extensive work with energy and utility sector clients to successfully provide a strategic planning workshop for ENWIN's executive leadership.

Our engagement begins with a detailed project launch phase designed to scope the boundaries of the project, confirm project success factors, and validate project timelines.

Our approach then focuses on a Discovery and Information Scan designed to provide the OPTIMUS | SBR engagement team with a detailed understanding of the current operating environment with ENWIN. This will primarily focus on internal research and stakeholder engagement but will also include elements of external research into significant industry forces as well as leverage OPTIMUS | SBR's industry best practice knowledge. The outcome of this step will be a data set to be used in the development of a Discussion Paper to provide a fact-based foundation for the Executive Workshop. The Discussion Paper will address the major issues, priorities, and major trends impacting ENWIN.

The Executive Workshop will leverage the Accountability Framework® (The Accountability Framework® System is described in detail in Section 6.0) which will be developed through the one-and-a-half day facilitated session. The session will confirm ENWIN's organizational Vision and set the path for aligning the organization to achieve key success factors. The outcome of the workshop will be a high-level strategy and framework to build the strategic plan and attain Board and key stakeholder buy-in.

The final step of the engagement will involve the production of an Executive Report. The report will outline all key findings, summarize the workshop results, and set the path for potential next steps. In addition to this the OPTIMUS | SBR team will work with ENWIN leaders to ensure successful knowledge transfer to facilitate future Action Plan development.

The following is a preliminary outline of the approach that OPTIMUS | SBR will follow for this engagement. Upon award of contract, our approach and further details may be refined and adjusted to ensure maximum effectiveness and fit within the ENWIN environment. Our proposed approach comprises five steps:

Step 1 – Project launch
Step 2 – Discovery and Information Scan
Step 3 – Workshop Preparation
Step 4 – Facilitated Workshop for ENWIN Executives (Developing the Accountability Framework®)
Step 5 – Final Report and Project Closeout

STEP 1: PROJECT LAUNCH– 1 DAY

The initial Step of the project will be designed with the goals of confirming the projects scope, creating an agreed-upon timeline, and confirming workshop attendees. The tasks conducted in this Step will allow for the creation of a solid working relationship between the OPTIMUS | SBR team and the ENWIN Executive team.

1.1 SET UP & KICK-OFF

- This will involve the OPTIMUS | SBR team confirming with the ENWIN leadership the scope and scale of the project. The initial kick-off meeting will involve the formalization of project dates, workshop attendees, and key deliverables.

1.2 DOCUMENT COLLECTION

- Receive internal documentation necessary to conduct a comprehensive engagement. These documents may include but are not limited to, Business & Strategy Plans, Mission Vision and Value statements, and organizational charts.

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STEP 2: DISCOVERY AND INFORMATION SCAN – 5 DAYS

This step of the engagement will draw on internal and external research and analysis of the operating and strategic planning environment within ENWIN. Additionally OPTIMUS | SBR will ensure that industry experience and knowledge of industry best practices are applied to fully research the engagement. The objective is to create a data set to be used in the development of a Discussion Paper and provide evidence based materials for the workshop session.

2.1 INTERNAL DOCUMENT REVIEW

- OPTIMUS | SBR will review the documents provided by ENWIN to develop an accurate understanding of the current state strategic direction and priorities. This review will give the project team an accurate understanding of the policies and procedures, documented challenges and opportunities, strategic planning history, services, organizational structure, categorization of staff, and current activities at ENWIN.

2.2 STAKEHOLDER ENGAGEMENT

- Phone interview and/or surveys will be deployed by OPTIMUS | SBR to engage key ENWIN stakeholders. The objective will be on identifying the specific focus and priorities of the Hydro organization and document specific viewpoints.
- It is expected that major themes and topics to be reviewed will include current operating and environmental issues, workforce requirements, OEB challenges and organizational priorities.
- Prior to the interviews OPTIMUS | SBR will build out interview scripts to identify the key issues to be investigated as well as leverage industry experience and best practices knowledge to expand discussions.

2.3 EXTERNAL DISCOVERY AND ANALYSIS

- The external discovery will focus on the identification of key operations within other leading LDCs. OPTIMUS | SBR will apply its research abilities and methodology to document and chart relevant findings.
- OPTIMUS | SBR will also leverage our energy and utility sector expertise to ensure relevance and applicability to ENWIN's operating environment. This will involve the research of industry accepted accreditations, standards, processes, and methodologies as well as the practices of industry leaders.

STEP 3: WORKSHOP PREPARATION – 3 DAYS

This step of the engagement will develop the Discussion Paper to be reviewed prior to and during the Executive Workshop. This paper will highlight key areas to address and review the priorities and viewpoints identified during stakeholder engagements. Additionally OPTIMUS | SBR will develop a workshop framework and agenda to successfully facilitate the agreed-upon objectives of the session.

3.1 DEVELOPMENT OF DISCUSSION PAPER

- OPTIMUS | SBR will summarize and prepare the key findings of the Discovery and Information Scan into a Discussion Paper format for review by workshop attendees.
- The Discussion Paper will involve a review and analysis of the importance of the various issues, opportunities, and priorities identified as well as the current state summary.
- Included in the Discussion Paper will be findings regarding the impact of ENWIN's last task-oriented strategic plan and the current absence of a strategy.

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3.2 WORKSHOP PREPARATION

- Prior to the workshop OPTIMUS | SBR will develop and produce all materials and tools (aids) to be used during the Workshop delivery.
- This will include the development of session objectives, desired outcomes, identified challenges, format, and a finalized agenda.
- OPTIMUS | SBR will also deliver to ENWIN attendees all required materials 2-3 days prior to the session date to ensure ENWIN stakeholders are property briefed and prepared for the session.

STEP 4: FACILITATED WORKSHOP FOR ENWIN SENIOR EXECUTIVES (DEVELOPING THE ACCOUNTABILITY FRAMEWORK®) – 3 DAYS

OPTIMUS | SBR will leverage its experience in facilitated services to conduct a one-and-a-half day Executive Workshop for ENWIN leadership for the purpose of creating the overarching strategies and near term priorities of the organization. It is expected attendees will include: Max Zalev, President and CEO; Victoria Zuber, Vice President of Finance and CFO; John Wladarski, Vice President Hydro Operations; Michael Duben, Vice President Customer Relations; Mike McKinnon, Director Corporate Services and Organizational Effectiveness. It is also understood that Max Zalev will not be in attendance at the Day One afternoon session.

4.1 DAY ONE MORNING SESSION (Thursday, October 13th, 2011 8:30am – 12:00pm)

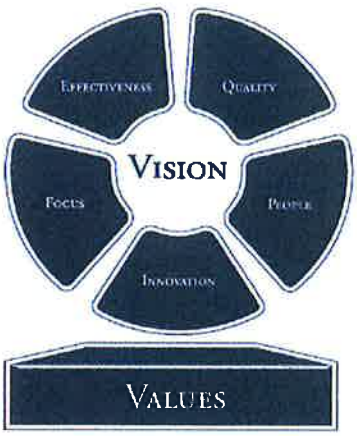
- The first morning session will be dedicated to reviewing the Discussion Paper, open-ended discussion, and probative questions with all attendees.
- The outcome of the morning session will be to achieve a consensus surrounding the real priorities and issues currently facing ENWIN and the executive team.

4.2 DAY ONE AFTERNOON SESSION (Thursday, October 13th, 2011 1:00pm – 5:00pm)

- The afternoon session of day one will be dedicated to confirming areas to further focus on.
- This will involve reviewing and discussing what actions, activities, and initiatives have been successful and which have not.
- By the conclusion of the afternoon session attendees will have worked with OPTIMUS | SBR facilitators to address the key issues and priorities identified within the context and challenges of past successes and failures and the current and near-term environment.

4.3 DAY TWO MORNING SESSION (Friday, October 14th, 2011 8:30am – 12:00pm)

- The second morning session will focus on exercises to develop the Accountability Framework®.
- This will solidify the Vision agreed to by ENWIN executives and align senior leadership in the establishment of strategic drivers.
- OPTIMUS | SBR facilitators will work with ENWIN executives to develop the high-level strategy and framework to build the strategic plan designed to guide



The Accountability Framework®

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- This session will also serve to ensure that ENWIN executives are able to achieve stakeholder and Board buy-in for the new strategic framework.

STEP 5: FINAL REPORT AND PROJECT CLOSEOUT – 4 DAYS

The final Step in the engagement begins with the development and production of a final report and executive debrief summarizing the work completed including the results of the Executive Workshop. The OPTIMUS | SBR team will also work to ensure that key knowledge and IP is transferred to ENWIN leadership to allow for continued success and future development.

5.1 FINAL REPORT AND EXECUTIVE DEBRIEF

- OPTIMUS | SBR will create a Final Report and Executive Debrief for the senior management team and key stakeholders as required. The Final Report will contain the conclusions, key findings, and agreed-upon decisions made during the workshop.
- OPTIMUS | SBR will work with the key stakeholders and senior executives to fully explain all findings and outcomes for the engagement

5.2 KNOWLEDGE TRANSFER AND PROJECT CLOSEOUT

- The final step of the engagement will involve a summary of the work completed, the delivery of the final report, and the hand-off of any relevant IP to ENWIN's Executive team.

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5.0 INVESTMENT REQUIRED

STEP 1 – PROJECT LAUNCH – 1 CONSULTING DAY 1.1 Setup & Kick-Off 1.2 Document Collection	$1,300
STEP 2 – DISCOVERY AND INFORMATION SCAN – 5 CONSULTING DAYS 2.1 Internal Document Review 2.2 Stakeholder Engagement 2.3 External Discovery and Analysis	$6,500
STEP 3 –WORKSHOP PREPARATION – 3 CONSULTING DAYS 3.1 Development of Discussion Paper 3.2 Workshop Preparation	$4,500
STEP 4 – FACILITATED WORKSHOP FOR ENWIN SENIOR EXECUTIVES (DEVELOPING THE ACCOUNTABILITY FRAMEWORK®) – 3 CONSULTING DAYS 4.1 Day One Morning Session 4.2 Day One Afternoon Session 4.3 Day Two Morning Session	$4,500
STEP 5 – FINAL REPORT AND PROJECT CLOSEOUT – 4 CONSULTING DAYS 5.1 Final Report and Executive Debrief 5.2 Knowledge Transfer and Project Closeout	$5,200
INTELLECTUAL PROPERTY INVESTMENT	$5,500
INVESTMENT SUBTOTAL	**$27,500**
LESS 10% PREFERRED CLIENT DISCOUNT	-$2,750
TOTAL INVESTMENT REQUIRED	**$24,750**

Notes

1. *HST will be added to total, as will any disbursements at cost specifically required and approved by ENWIN.*
2. *Payment terms: Effort to be invoiced monthly.*
3. *OPTIMUS | SBR will be delighted to discuss how we can assist ENWIN in moving forward with the required Action Plan to execute the strategy and/or to avail some of the other tools within our Accountability Framework® System.*

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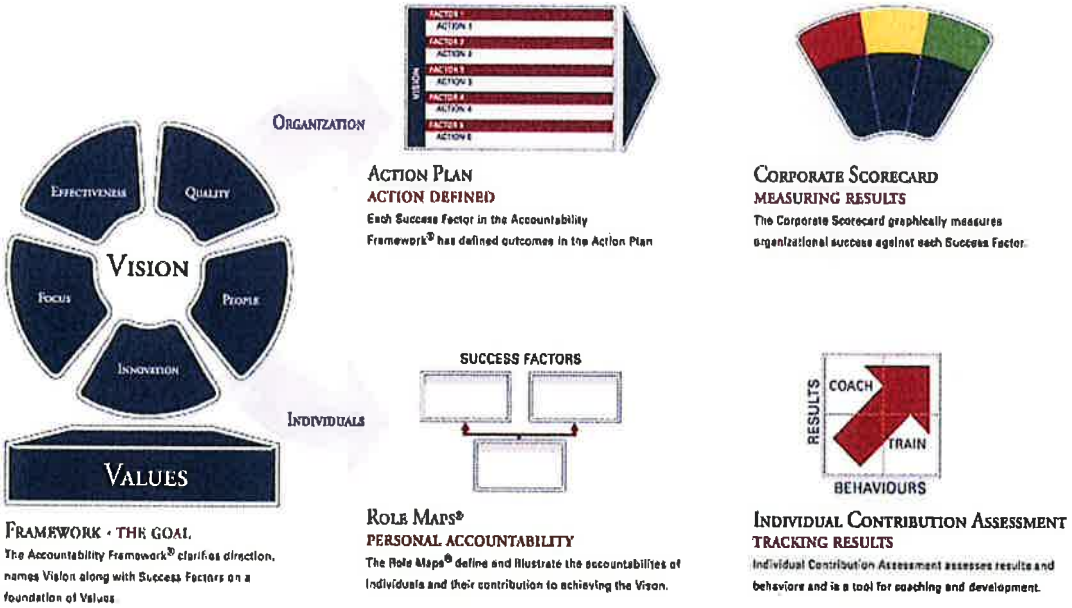
6.0 THE ACCOUNTABILITY FRAMEWORK® SYSTEM

The Accountability Framework® System (AFS) is our trademarked approach to guiding ENWIN through the development and potential future implementation of its strategic plan and offers the key to organizational success. For this proposed engagement we will be leveraging the first module of the Accountability Framework® System: The Framework®. This tool will achieve ENWIN's desire to develop a strategic framework. Section 6.2 contains information regarding the remaining steps of the Accountability Framework® System and the benefits of their potential implementation at ENWIN in a future engagement.

OPTIMUS | SBR has successfully implemented the Accountability Framework® System in many organizations throughout Canada. These organizations now have a lasting impact and applicability through the years they have implemented OPTIMUS | SBR's Accountability Framework® System. Past clients benefiting from the Accountability Framework® System include;

Hydro One Networks Inc.	Infrastructure Ontario
Northumberland Hills Hospital	Sun Life Financial
Toronto French School	Trillium Health Centre
Joseph Brant Memorial Hospital	Mississauga Halton CCAC
Orillia Soldier's Memorial Hospital	Toronto East General Hospital
Hotel Dieu Grace Hospital, Windsor	The Ottawa Hospital
Canadian Dental Association	St. Joseph's Healthcare, London
Ontario Nurses Association	Ontario Dental Association
The Michener Institute	Ontario Health Quality Council
Ontario Tourism Marketing Partnership	United Church of Canada

OPTIMUS | SBR has the required expertise to align both organizational and individual performance to ENWIN's vision and mission. Being professionals in both strategic and operational alignment and accountability, we have become well known for our ability to successfully implement the Accountability Framework® System as a core system within our client organisations.



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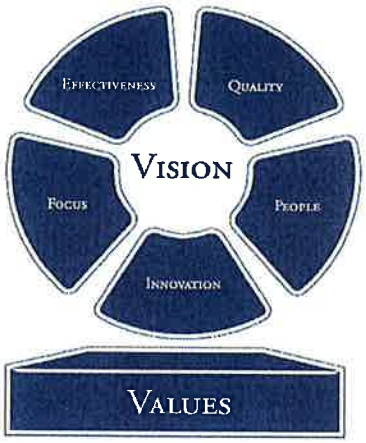
6.1 BUILDING THE ACCOUNTABILITY FRAMEWORK® (TO BE DEVELOPED DURING THE PROPOSED EXECUTIVE WORKSHOP)



Through a process that is research based and proven through nearly 30 years of successful implementation, we facilitate workshop sessions for the development of a simple construct that will confirm the organizational Vision and Mission at within ENWIN.

Strategy begins with the Utility's leadership – confirming the Vision and identifying the five key Success Factors, including definitions, which will be used to focus all organizational and individual effort and to measure future progress in key areas.

An environmental analysis will also assist in identifying the Mission and Values of the organization which would then be supplemented by research gathered from additional OPTIMUS | SBR tools such as; statistical data, environmental scans, literature reviews, and SCORED and PEST frameworks.

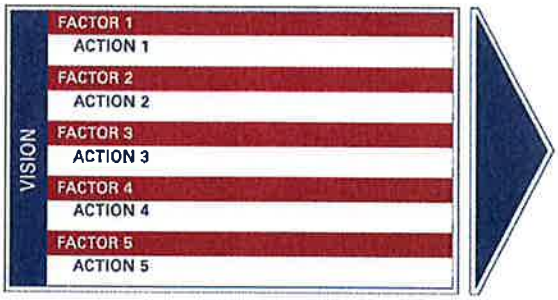
Another element of the Framework is to identify new Values as well as highlight existing Values that may have been previously identified. This would include a thorough review of the previous strategic plans currently in use by ENWIN. From this we will build definitions and associated behaviours that illustrate how each Value is modeled in day to day interactions. This is crucial to building a culture that is in full alignment with the Vision, Mission and Success Factors.

6.2 STRATEGIC ACTION PLAN, ROLE MAPS®, SCORECARDING, AND INDIVIDUAL CONTRIBUTION ASSESSMENT

It is important to note that Strategic Action Plans, Role Maps®, Scorecarding, and Individual Contribution Assessments are not within the scope of this proposal. However, in order to fully understand the flexibility, completeness, and potential of future engagements to take full advantage of these Accountability Framework® System components their descriptions are provided below. Additionally, these steps would form the starting point for any future engagements with ENWIN.

STRATEGIC ACTION PLANS – (Outside the Scope of this proposal)

Our approach to implementation begins with a high level Strategic Action Plan aligned with the Vision and essential Success Factors defined by leadership.



The Strategic Action Plan integrates and aligns all organizational initiatives to the achievement of the Vision and is sorted by the five Success Factors identified in Step One. The Strategic Action Plan becomes the organizational agenda linking effort, responsibility and measurement. It identifies the specific key organizational objectives and the measures that ENWIN will use to gauge success.

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The first draft of the Strategic Action Plan is typically developed in workshops with the Senior Management Team for confirmation by the Board of Directors. The second draft confirms the key organizational objectives and measures and adds key high level long-term actions and assigns responsibility; identifies resource requirements; implementation time tables; with milestones and measurement clearly articulated.

SCORECARD CREATION - (Outside the Scope of this proposal)

Evaluation of the Strategic Plan is essential for success. Our Scorecarding system would measure and evaluate the objectives identified and defined by ENWIN's leadership and ensure alignment to the Mission, Vision and Values within the framework and, by extension, action plan.

A key step in the development of the any organizations' Strategic Plan is to articulate the clear set of measurements and present them in a straightforward format for evaluating and communicating results. The flexibility of the Accountability Framework® System allows for information to be input into ENWIN measurements and reporting formats or implemented in an OPTIMUS | SBR developed report format. This would provide on-going reporting of the Strategic Priorities.

The process for developing and using score-carding would be based on the Action Plan. For each strategic theme, several outcome indicators are determined. For each indicator we use a tightly facilitated process to identify appropriate outcomes. The measures are included in the Action Plan and are used to build more detailed plans and measures that are used to effectively deploy strategy throughout the organization.

The ultimate outcome of the scorecard creation would be a comprehensive set of measurements that would effectively encompass the entire strategy and yet can be summarized in a few key governance level measures that can monitor the strategic plan's effectiveness.

ROLE MAPS® - (Outside the Scope of this proposal)

The Role Map® is unique to the Accountability Framework® System and is trademarked. It is a visual presentation of the role that each layer of the organization has in attaining the Vision of the organization in each of the identified Success Factors.

OPTIMUS | SBR would develop a straightforward process that effectively ties ENWIN's strategic plan with implementation at every level of the organizations. Our Role Mapping process identifies individual accountability for each Success Factor element of the Strategic Plan.

The Role Map® names individual role accountabilities by defining and affirming each individual's contribution to the organization. Within ENWIN this exercise may involve the Board of Directors, Senior Management Teams, Directors, Managers, and other key stakeholders as identified by either organization and OPTIMUS | SBR. Role Maps® help everyone understand how they fit into the 'big picture' and form the basis for performance management.

Each Role Map® is developed in draft form during initial facilitation sessions then, if necessary completed in a second follow up session. For larger groups a third development session and further presentations may be required to achieve full engagement. At the end of this process ENWIN would have clear roles and accountabilities for the entire organization aligned with the Accountability Framework® System

The Primary goals of the Role Maps® are to

1. Clearly communicate the Vision and Success Factors as well as Strategic Priorities
2. Identify gaps and overlaps in accountabilities
3. Engage and align the larger

Once Role Maps® are created, a Validation alignment exercise will be held where members of all levels of the organization look closely at each other's role. There is considerable interchange and learning during this process as groups review and clarify the inter-relationship of roles of the total team. The process reduces overlap and duplication. The deliverable is a final version of each person's accountabilities within the

OPTIMUS | SBR

Accountability Framework® that can be published or posted on the organizations intranet for ease of communication.

THE INDIVIDUAL CONTRIBUTION ASSESSMENT (ICA) - (Outside the Scope of this proposal)

The Individual Contribution Assessment would be a powerful tool to integrating personal performance with ENWIN's Vision and Strategy. The ICA incorporates three components into everyone's personal requirements:

1. Setting and achievement of personal objectives aligned with organizational priorities
2. Improving role execution, aligned with ENWIN's Success Factors or Strategic Priorities
3. Demonstrating values-based behaviours common throughout each organization.

The ICA is a powerful Performance Management system that could be implemented in a paper or web-based platform for successful implementation by ENWIN.

OPTIMUS | SBR will be delighted to discuss how we can assist ENWIN in moving forward with the required Action Plan to execute the strategy and/or to avail some of the other tools within our Accountability Framework® System.

Stores and Supply Chain Process Review
July 09 – July 27, 2012

Prepared by:

Focused Management Resources

735 Avenue Road Toronto, Ontario M5P 2J9 V: 416-489-8885 F: 416-544-0204 Web: www.fmrcg.com

Agenda

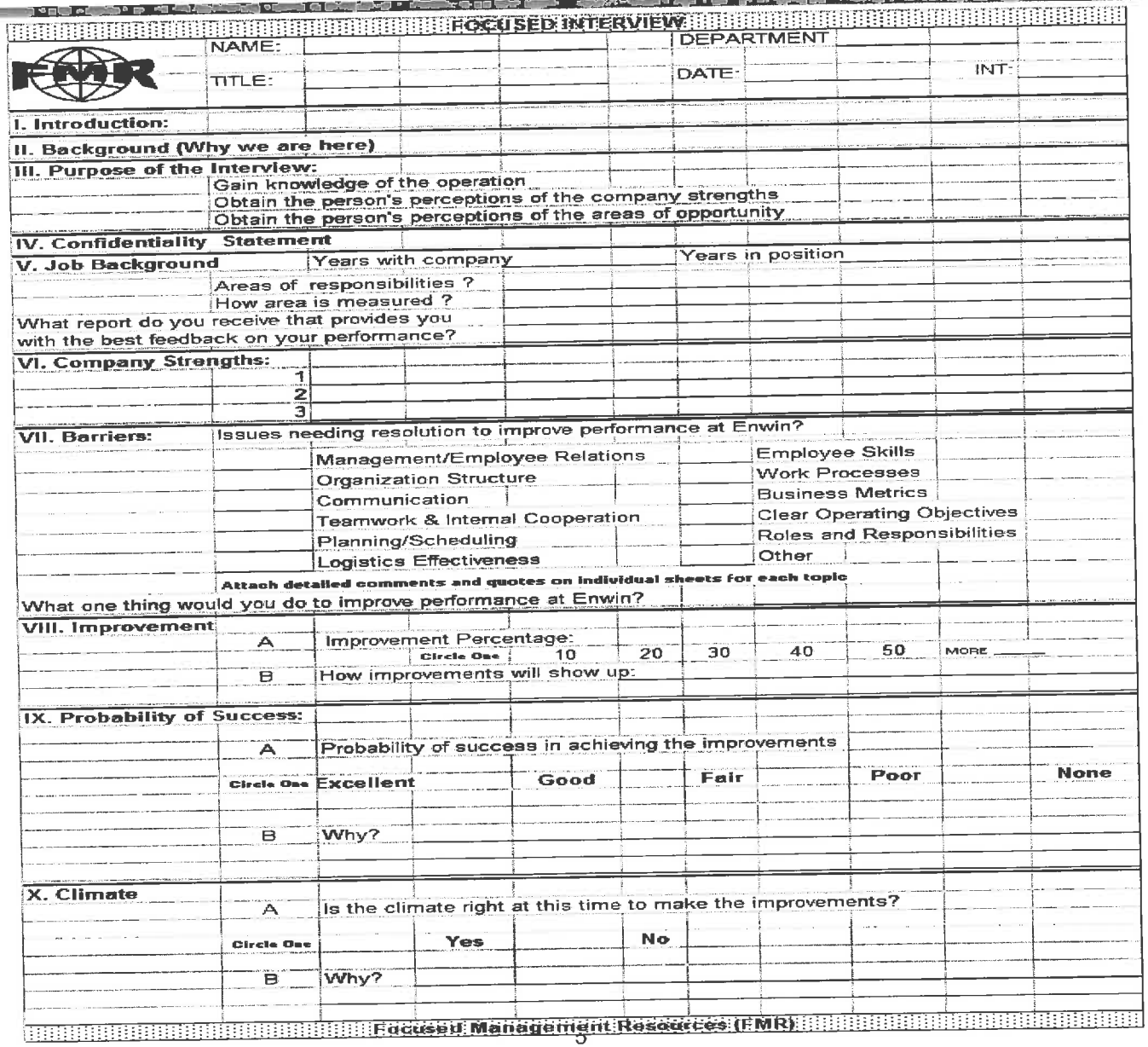
- Focused interviews
- "Day In the Life Of" Studies
- Potential Improvements
- Top Ten List
- Next steps

Focused Interviews

Focused interviews - purpose

- Capture perceptions of people interviewed
- Confirm direction and gain additional insight into issues and opportunities
- Allow the team to target specific issues
- Introduce ourselves to the organization

Focused interviews - purpose



FOCUSED INTERVIEW

NAME: DEPARTMENT

TITLE: DATE: INT:

I. Introduction:

II. Background (Why we are here)

III. Purpose of the Interview:

- Gain knowledge of the operation
- Obtain the person's perceptions of the company strengths
- Obtain the person's perceptions of the areas of opportunity

IV. Confidentiality Statement

V. Job Background Years with company Years in position

- Areas of responsibilities ?
- How area is measured ?

What report do you receive that provides you with the best feedback on your performance?

VI. Company Strengths:

1
2
3

VII. Barriers: Issues needing resolution to improve performance at Enwin?

	Management/Employee Relations		Employee Skills
	Organization Structure		Work Processes
	Communication		Business Metrics
	Teamwork & Internal Cooperation		Clear Operating Objectives
	Planning/Scheduling		Roles and Responsibilities
	Logistics Effectiveness		Other

Attach detailed comments and quotes on individual sheets for each topic

What one thing would you do to improve performance at Enwin?

VIII. Improvement

A Improvement Percentage: Circle One 10 20 30 40 50 MORE

B How improvements will show up:

IX. Probability of Success:

A Probability of success in achieving the improvements

Circle One **Excellent** **Good** **Fair** **Poor** **None**

B Why?

X. Climate

A Is the climate right at this time to make the improvements?

Circle One **Yes** **No**

B Why?

Focused Management Resources (FMR)

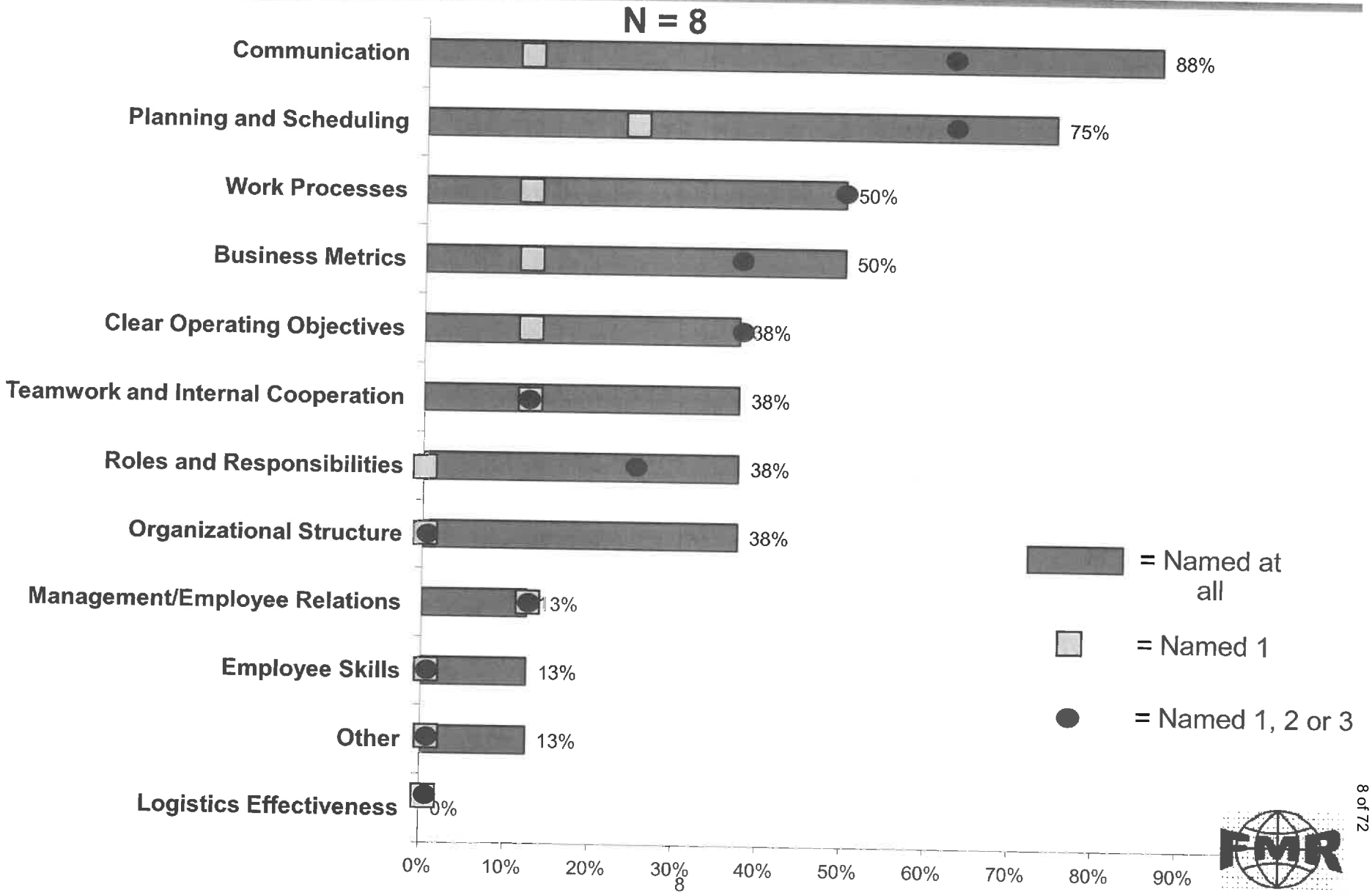
8 focused interviews conducted

- Barry Leavitt
- Walt Argent
- Amy Fratarcangeli
- John Doan
- Marilee Quinlan
- Susanne Sauve
- Paul Gleason
- Mike Douglas

People cited many strengths…

- Teamwork (2)
- Any training that's required is provided (2)
- Good people (2)
- People have the desire to do the right thing
- If our processes were on the rails, people would follow them
- People are supportive and motivated
- Everybody is nice
- It's a good place to work
- Our organization structure makes sense
- We do an excellent job at supplying power and water to our customers
- Our business is insulated from the "real world"
- Front line supervisors are the strength of the company (but without much support)
- We have an accessible, open door organization structure
- We've made significant advances in technology (GIS, etc.)

Focused interviews - issues



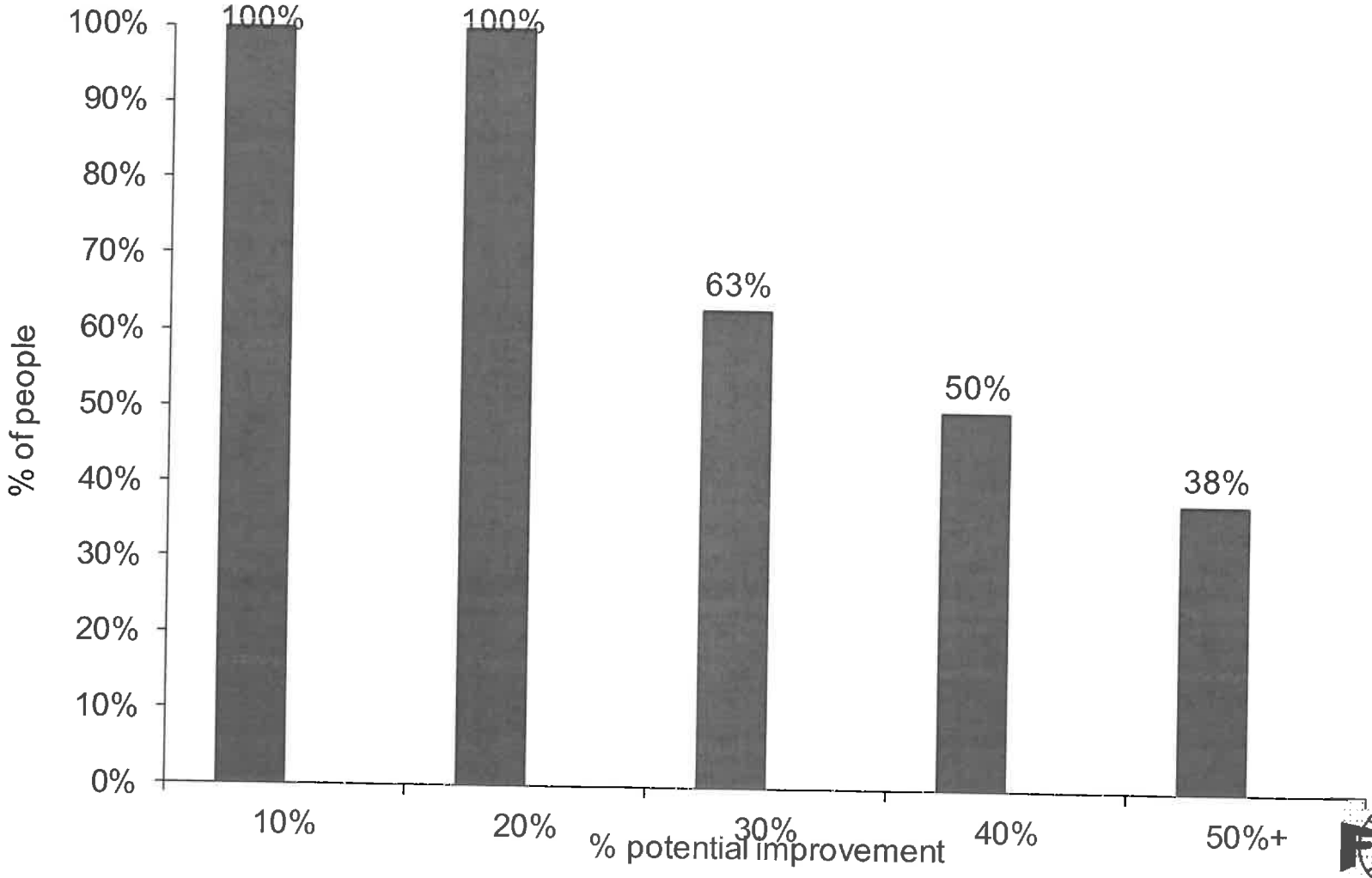
People see information & direction as requiring focus

"What one thing would you do to improve performance at EnWin?"

- Communication, planning and scheduling (2)
- Get people to follow SAP
- Establish the process rules and follow them
- Develop some simple metrics and use them to manage
- Tell people their responsibilities and give them the authority to deliver
- Set up multi disciplinary work teams or a steering committee to break down the silos
- Provide strong leadership and direction

Focused interviews - potential improvement

"If you were able to minimize the issues you have identified, what percentage improvement in performance do you believe would result?"



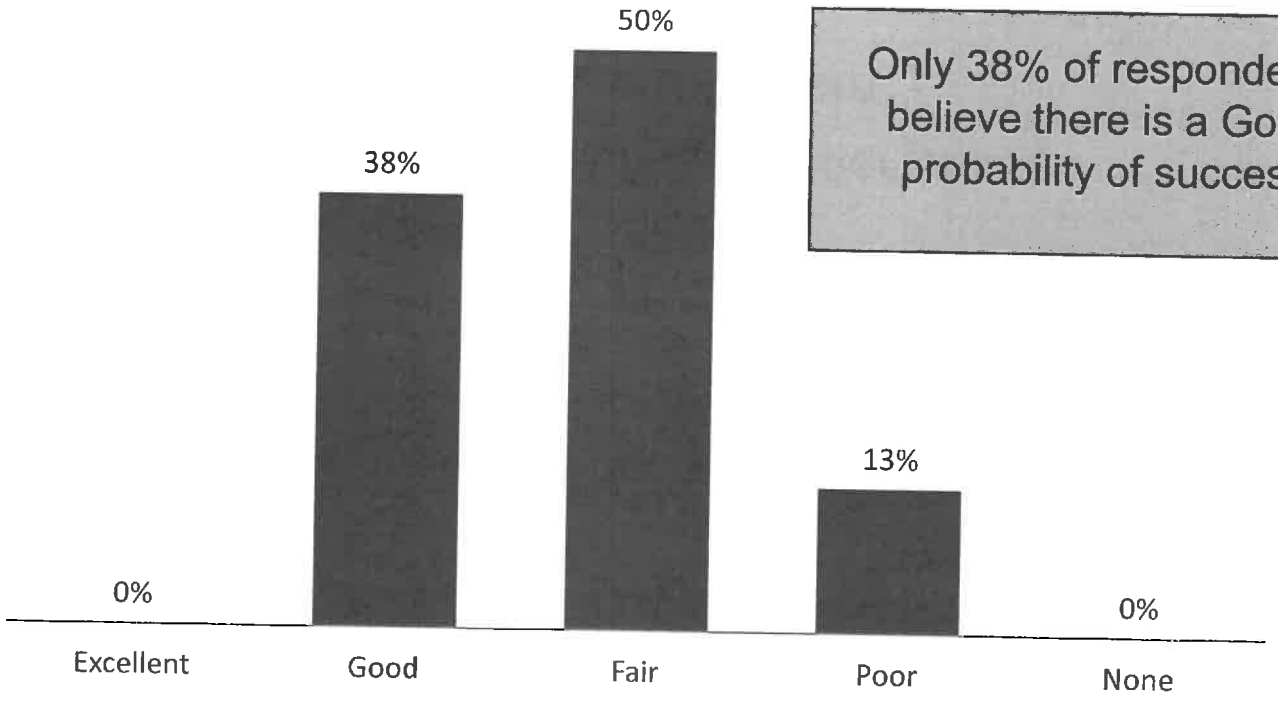
Performance improvements are focused on reduced cost and improved productivity

"How will improvements show up?"

- Lower inventory levels (5)
- Better procurement at better prices (4)
- Save money (4)
- Improved productivity (2)
- Fewer stock outages
- Better vendor relationships = better prices
- Less frustration from top to bottom
- Get the trucks out on time
- More people doing their jobs better and sooner

Focused interviews - probability of success

"What do you think is the probability of success in achieving the improvements?"



Probability of Success

Why good?

- Because it needs to be addressed
- "Excellent" is too hard. If senior management supports this and gets us help, it will work
- To put things in place requires cultural and organizational changes. The risk is that management may not provide enough commitment to support the change
- We need the trust of our customers, we need help in making changes and we need to be lead by our leaders

Why fair?

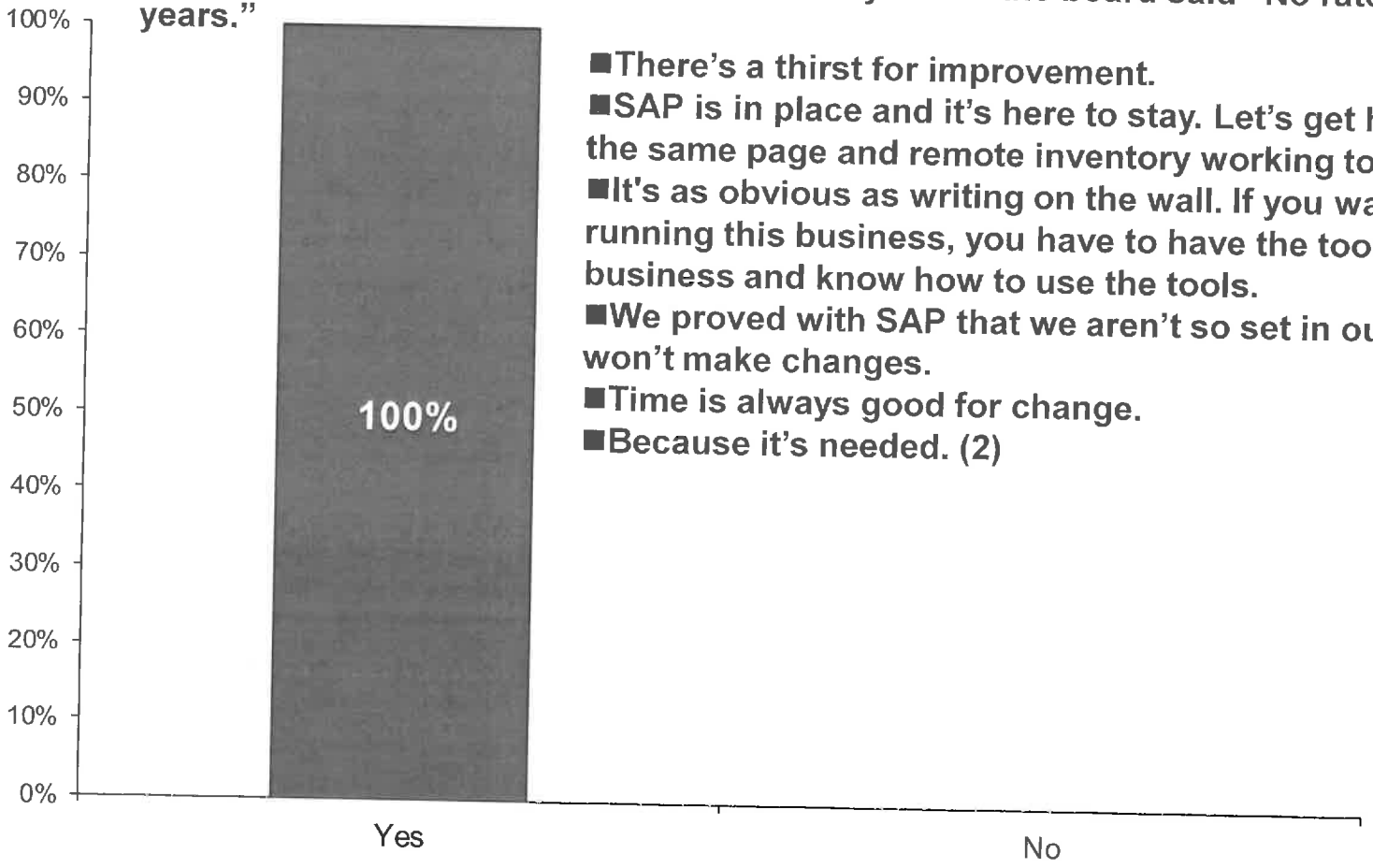
- People are resistant to change and fall back into their comfort zones (2)
- We need to have all levels of management recognize the need to run the business and get the tools to do it
- It depends on the approach. We know it has to be done but we also know that we can't do it ourselves

Why poor?

- We need to improve but I don't think the hierarchy will change. It's necessary for them to support us for us to make changes here. It needs support from top to bottom

Focused interviews - climate

"Is the climate at EnWin it right to work on issues of this type?"



- **People are open minded, approachable and willing to help.**
- **It's absolutely the right time but it's losing energy. Early in the year we got the message from the top that "We have to get better." The mayor and the board said "No rate increases for five years."**
- **There's a thirst for improvement.**
- **SAP is in place and it's here to stay. Let's get hydro and water on the same page and remote inventory working too.**
- **It's as obvious as writing on the wall. If you want to continue running this business, you have to have the tools to run the business and know how to use the tools.**
- **We proved with SAP that we aren't so set in our ways that we won't make changes.**
- **Time is always good for change.**
- **Because it's needed. (2)**

Issues – communication

- Purchasing needs information about Capital jobs, such as "What is the start date?"
- We need accurate information and we need proper SAP training to communicate.
- We just don't communicate from one department to another – no planning!
- We have a lot of nice people but no one questions anything, we just "do things".
- Inventory levels are changed but the users don't find out until they run out of something.
- We buy high cost items, like transformers, way too early because nobody communicates the planned work.
- Material gets taken after hours and the paperwork doesn't catch up and then later we just write it off.
- What's the corporate goal? Does anybody know and if so, could they tell me?
- We just don't communicate. I learned about our restructuring on the radio.
- We operate out of three facilities and EnWin and WUC don't talk to each other.
- We would rather "do" than plan. That way we think our communication i accurate.

Issues – planning and scheduling

- We don't have the details. We schedule jobs "between January and December".
- Too many jobs are "field engineered".
- Our planning isn't 100% wrong but it feels like it's getting close.
- A lot of our planning for today happens in the morning of the same day.
- Planning is not nearly robust enough causing us to waste money in a lot of ways. Poor productivity, poor quality, poor buying – we need to focus.
- We need the right information and the right dates entered into the system or things will fall apart.
- If we plan properly, why do we end up with purchases being made on Amex?

Issues – metrics

- It seems like the only way to get information is by asking I.T. All we have with our new system is what we had before.
- We don't know what we need to measure, let alone how to do it.
- As a manager you need KPI's to support the goals of the corporation and to know where you stand. These are completely lacking here from top to bottom.
- We have a lot of data but we don't pay much business attention to it. Your DRIP word fits us.

Issues – work processes

- First we need to define our processes, then follow them and then enforce them. (2)
- Our current processes don't work or aren't being followed.
- We need to look at them and understand them because people ask for changes in the system with no regard for processes.
- It looks like we didn't have enough people involved with or new system so we still have a lot of people acting like they're in implementation mode, not user mode.
- Our lack of process awareness is huge. If you ask 10 people how something is done, you will get 10 answers.
- We definitely need to identify and fix our processes. Who is responsible for keeping documents updated?

Issues – clear operating objectives

- What are they? There should be no question about what they are and they should roll down from the corporate objectives right to the front line.
- Does anybody know what the corporate goals are?
- How would I know if I'm meeting them?
- We have objectives at a high level but they're not broken down into tactical objectives where we can take action.

Issues – teamwork and internal cooperation

- We have a lot of silos. There's a lot of "he's not doing it, why should I?"
- We are trying to get people to take responsibility for their own inventory and they tell us it can't be done and then they ignore us.
- Engineers create a work order and then operations will change it but not tell anybody.

Issues – roles and responsibilities

- We have a governance model that's broken. Do we know the "go to" person?
- Policies and procedures should be done at a level above supervisor.
- People might say they know who is supposed to do what but do we really have clearly defined roles and responsibilities? Even if they exist, do they reflect what we need to do?

Issues – organizational structure

- Who is supposed to talk to us about what we're doing? We need performance management.
- I don't know how decisions get made or communicated because I don't know where they start or how far they go.
- Our decision making barriers starts with the hierarchy at the top. Most decisions need board approval and they only meet 4 to 6 times a year and if you don't get an answer, you just wait until next time.

Issues – management/employee relations

- You want the supervisor to manage the resources, not doing the work. They should identify the root cause instead of just putting a band aid on the problem.

Conclusions

- EnWin Utilities employees, at all levels, are refreshingly frank and honest.
- There appears to be a good understanding of the need and opportunity for improvement.
- The predominant opinion is the need to improve Communication, Planning and Scheduling. Improved Work Processes will ameliorate many of the issues described as communication barriers and lessen the skepticism of those who doubt the company's ability.
- People want to improve the company but are concerned about whether Senior Management is committed or not.

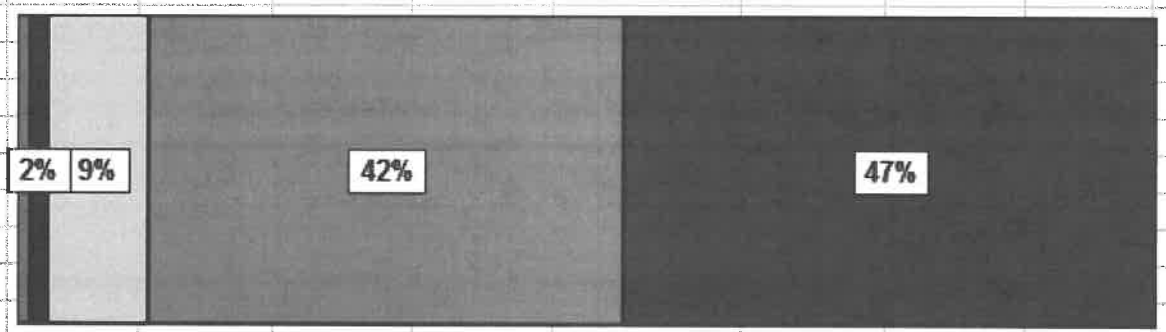
"Day In the Life Of" Studies

Bill Sherman

SUMMARY ACTUAL

CODE	DESCRIPTION	TIME (MIN)	%
	Management Supervision	5	1%
	Peer Training	7	2%
	Breaks	40	9%
	Direct Work	188	42%
	Available	211	47%
	Total	451	100%

Actual

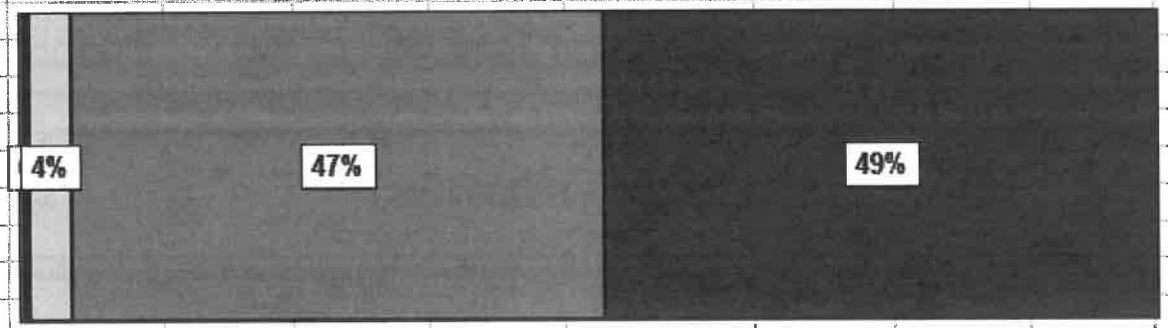


Bob Duggan

SUMMARY ACTUAL

CODE	DESCRIPTION	TIME (MIN)	%
	Management Supervision	2	0%
	Peer Training	2	0%
	Breaks	18	4%
	Direct Work	223	47%
	Available	232	49%
	Total	477	100%

Actual

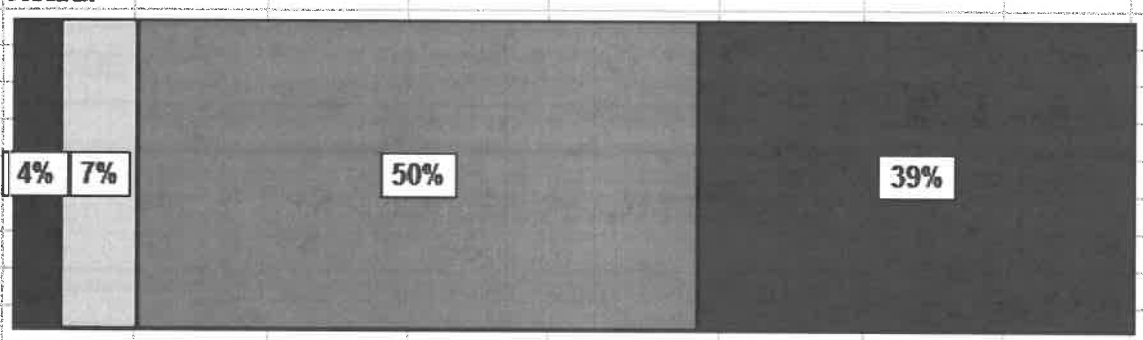


Jeff Wilson

SUMMARY ACTUAL

CODE	DESCRIPTION	TIME (MIN)	%
	Management Supervision	0	0%
	Peer Training	20	4%
	Breaks	32	7%
	Direct Work	232	50%
	Available	182	39%
	Total	466	100%

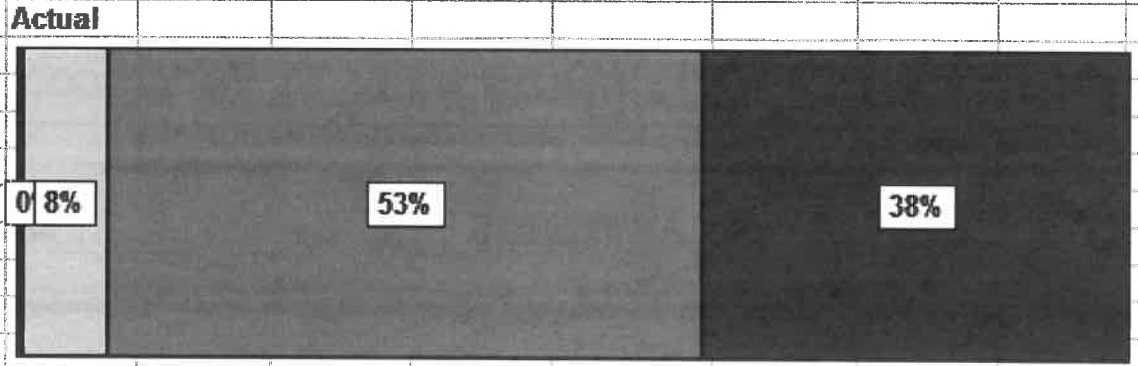
Actual



Rhonda Lagace Peacock

SUMMARY ACTUAL

CODE	DESCRIPTION	TIME (MIN)	%
	Management Supervision	0	0%
	Peer Training	2	0%
	Breaks	31	8%
	Direct Work	216	53%
	Available	155	38%
	Total	404	100%

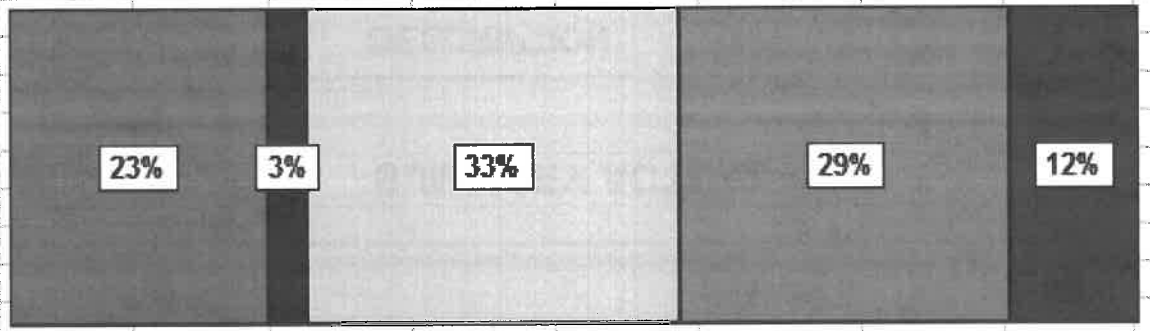


Walt Argent

SUMMARY

CODE	DESCRIPTION	TIME (MIN)	%
	Active Management	95	23%
	Training	14	3%
	Administration	138	33%
	Direct Work	121	29%
	Available to Manage	48	12%
	Total	416	100%

Actual

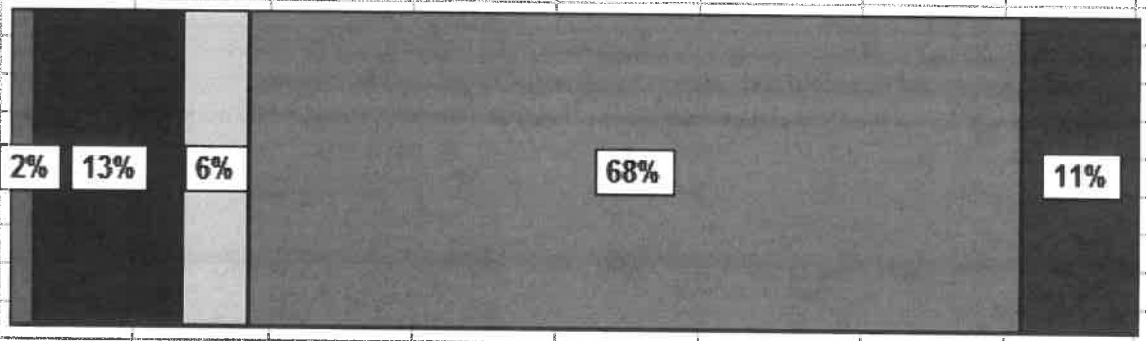


Mike Douglas

SUMMARY

CODE	DESCRIPTION	TIME (MIN)	%
	Active Management	4	2%
	Training	25	13%
	Administration	11	6%
	Direct Work	130	68%
	Available to Manage	20	11%
	Total	190	100%

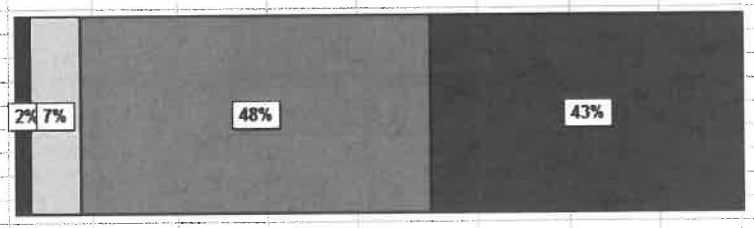
Actual



Average – Hourly and Salary

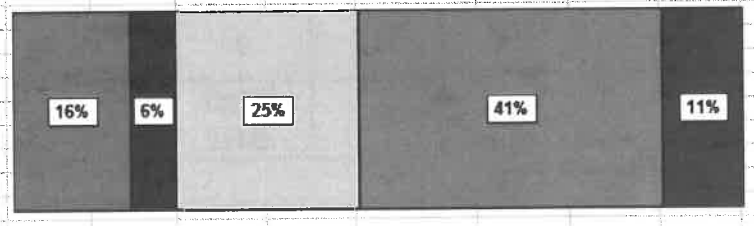
HOURLY AVERAGE

CODE	DESCRIPTION	%
	Management Supervision	0%
	Peer Training	2%
	Breaks	7%
	Direct Work	48%
	Available	43%
	Total	100%



SALARY AVERAGE

CODE	DESCRIPTION	%
	Management Supervision	16%
	Peer Training	6%
	Breaks	25%
	Direct Work	41%
	Available	11%
	Total	99%



Potential Improvements

Automation: Potential Improvements

- In process: automatic PO Generation for standing Contractors. Saves Buyer time.
- Historical Usage available in SAP. Determine patterns for purchasing.
- Set safety stock based on historical usage.
- Create Pick List for Ordering at Stores. Can customize in SAP or do data dump into other software.
- Capacity functionality exists in SAP i.e. for setting annual Forecast. Assess SAP customization or use of interface.
- System as relates to Purchasing is tied to Material Quantity, Item and Date. Purchasing works to system. Should not have past due dates or fictitious dates in system.
- Knowledge and understanding of functionality as it relates to SAP is limited. i.e. Unplanned issues report which is available

Automation: Potential Improvements

- Use of e-forms to replace manual paper where applicable.
- Not reconciling unplanned issues to a Reservations when an alternative material is used. Leads to inventory build up.
- Use of Microsoft Project Enterprise version. Not as flexible as other planning software. i.e. P6
- Reserved or inventory on hold not flagged in system.

Performance Metrics : Potential Improvements

- Low cost is only factor for Purchasing criteria. Best practice is cost plus vendor performance.
- Vendor performance metrics reviewed including # delivered on time, number of invoice issues and asset performance in the field.
- Planning guidelines set for staff. Crewing guides established to assess if over or under staffed.
- Need to identify root cause reasons for unplanned issues and track performance.
- Initiation of Skills Matrix to assess competencies. Lack of skills cited as reason not to offload direct work from Foreman.
- Desired Stores KPI's: Inventory carry forward, Open Reservations, Fill Rate % at the Window.

Performance Metrics: Potential Improvements

- Tender broken down by key planning activity. Planned item quantity and hours broken down by activity. Can be a separate Schedule.
- Establish Corporate Dashboard. KPI's reflect an overall end to end process. Pre Construction > Construction > Post Construction. i.e. schedule adherence metrics, cost adherence metrics for project work.

Reporting: Potential Improvements

- Build start date included in Tender Package. Set expectations and confirm availability of Contractor.
- Board Governance. Proposed Purchase can be brought to the Board for a spend of <$100K if a multi-year contract.
- Tender and Budget approval are separate. Align timing to present both to Board for approval.
- Constraint created with the limited number of times which Board meets. i.e. 4X per year. Need to align contract expiration with meeting dates.
- Align with City threshold for Budget approval which is $150K. More flexibility.

Reporting: Potential Improvements

- Desired Stores Reports: Slow moving items, Scrap Reports, Dormant Stock, Dead Assets.
- Initiation of Lessons Learned. A Post Mortem of large Capital jobs by Engineering, Operations and Logistics.
- Hard math and trending analysis not done. I.e. historical capital, maintenance, reactive. Basis for solid forecasting.
- Review of Estimate versus Actual versus Budget. i.e. to ascertain "Burn Rate". Need to spend Budget dollars or lose it.
- Material can be charged to wrong Work Orders. Need to rectify before closing WO.
- Use of Red Tag system to quarantine obsolete inventory.

Cost: Potential Improvements

- Obsolete stock estimated at $.5 to $1M.
- Annual write off plan set. Scrap identified and sold off. Write off allowance built into annual budget.
- Bigger contractors can have greater buying power than EnWin. Move to supply/build relationships. Contingent on solid planning.
- Inventory used as Insurance to accommodate for inadequate planning.
- Cash flow impact of buying material based on erroneous start date.
- Negative impact of unplanned issues on inventory levels and cash flow.
- Negative impact of unplanned picks on Stores staffing and flexibility.

Cost: Potential Improvements

- Insufficient forward planning leads to costs for Corporation i.e. Q4 rush to complete Capital projects using Contractors.
- Rationalize inventory level i.e. set level to accommodate Maintenance and Reactive requirements with an allowance for Capital work.
- Work in process build up. Projects not closed have a cash flow impact.
- Explore option of a Complete Turn Key Shop: Design/Supply/Build.
- Excess crewing availability identified through effective Planning and Scheduling. Used to offset need for Contractors.

Work Processes: Potential Improvements

- Create bank of Designs for Capital. Design butts up against Build. Doesn't allow for flexibility.
- Check material availability and lead times to see Build start date is reasonable.
- Move from commodity based Purchasing to managing Vendor relationships as part of long term Purchasing strategy. Take advantage of buying power and low cost of some vendors and contractors. Contingent on effective Planning and Scheduling.
- 1200 Vendors in Vendor Master. Rationalize to emphasize high performers.
- Safety stock reflected in Inventory Management.
- Build contingencies into Planning process. i.e. backfill projects when start dates are moved.

Work Processes: Potential Improvements

- Order from the BOM at Stores window. Currently ordering from the Drawing.
- Feedback to Engineering when BOM not adhered to. Capture changes and rationale.
- Initiate a formal Change Request process i.e. for material changes.
- Non value add work for Buyer when working on a Reservation out of date i.e. 6 months.
- Quick fix: Determine usage patterns for last 2 to 3 years in SAP. Align quarterly purchasing with usage versus what's on Reservation.
- Locate Purchasing to closer proximity to Planner, Engineering and Operations for greater synergy.

Work Processes: Potential Improvements

- Gap: Engineering, Operations and Inventory in Pre-Build. Include Logistics in preliminary Build discussion. i.e. Pre-Construction meeting.
- Use of Vending Machine to dispense gloves to reduce morning Stores window traffic.
- Application of 6S in the yard for better clarity of material. i.e. better signage and storage
- In the past "Robbed Peter to pay Paul" between crews when kitted and staged material.
- Process consumable Orders on afternoon before for morning pick up i.e. gloves to reduce window traffic. Estimated 75% of window traffic.
- In process: creating a culture of cross-helping in Stores between Water and Hydro..

Work Processes: Potential Improvements

- Standardization of material handling between internal crews and Contractors. Move to concept of interchangeable crews. i.e. pick materials > kit > palletize >shrink-wrap > place WO on pallet > stage > pick up. Eliminate need for daily line up at Window for planned work.
- In process: move to drop ships on site. Needs to be supported by effective Planning and Scheduling.
- Receipt of orders for Projects 2 days in advance for Material Ready.
- Move to set Planning Windows tied to Material Lead times and interdependencies. i.e. Tx-12 weeks, Concrete poles 12 to 16 weeks, Wood poles 2 weeks.
- Increase the number of suppliers for concrete poles. Currently one provider.

Work Processes: Potential Improvements

- Owner of entire process defined for end to end process. i.e. PMO.
- Asset Plan reviewed with Engineering and Operations by Q3/Q4 of each year. i.e. identify carry forward and crew availability. Contractor requirements identified and communicated.
- Contract out Design as required to build bank of Capital jobs. Designs too tight to Construction.
- Identify Engineering priorities for conflicting demand in Operations.
- Engineering capacity identified for planning purposes.
- For reasonable Build start dates, Engineering Techs works back from desired Build start date to assess reasonableness of the date i.e. Design start <MC's, material lead times < job receipt in Construction < Locates, Permits < Start date

Work Processes: Potential Improvements

- WBS (Work Breakdown Structure) not done in current planning. Planning standard for most industries.
- Key interdependencies not formalized in planning. i.e. Board meetings, Material Lead times.
- Planning start dates currently set for beginning of year.
- Pre filled Pick Lists implemented with quantities left blank for completion. Contingent on agreement and sign off of the BOM by Engineering, Operations and Logistics.
- Question around level of effort exerted in Engineering if pick from the Drawing.
- Currently Tech checks inventory status in Pre-Construction discussion with Operations and Engineering. Better if Logistics provides input.

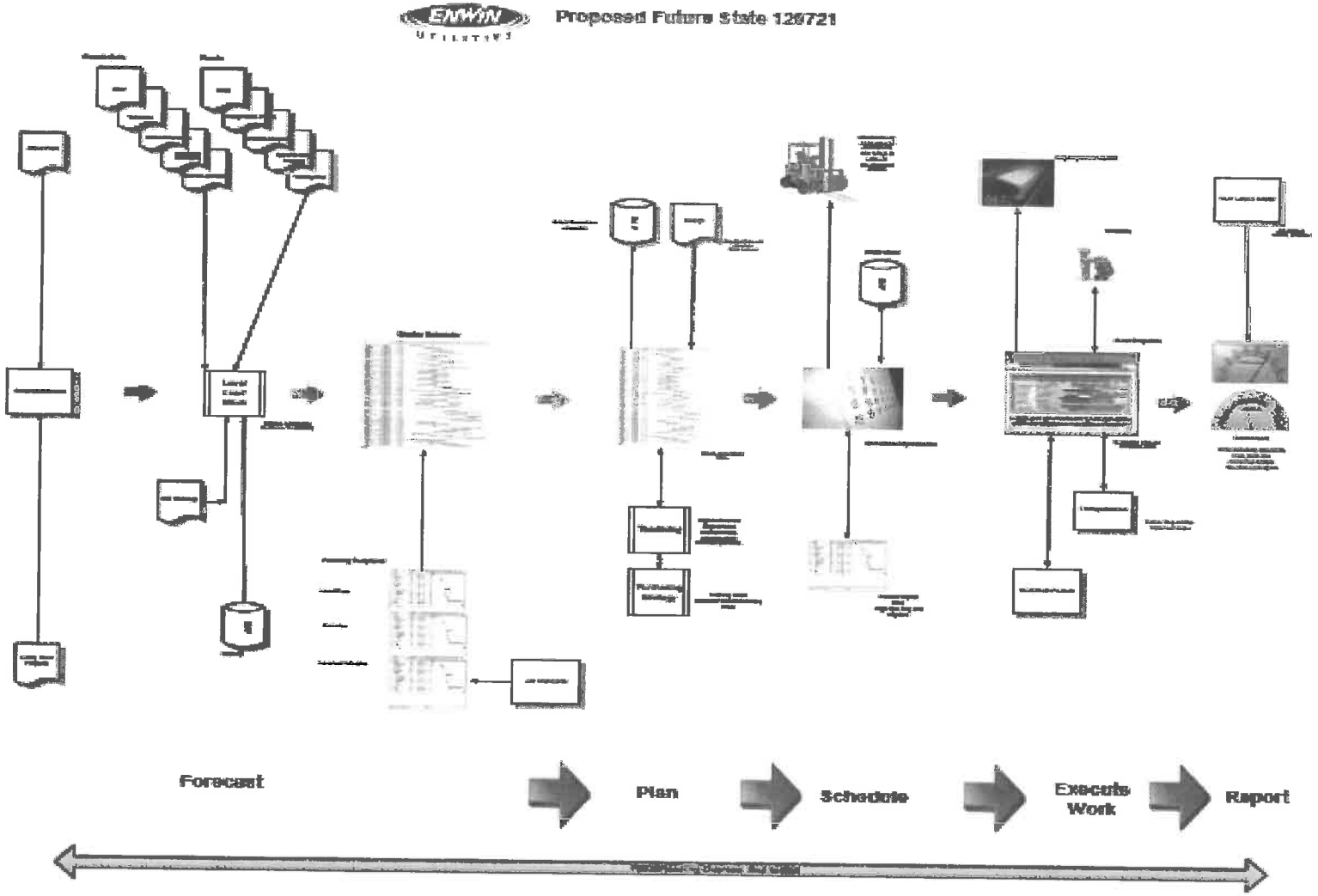
Work Processes: Potential Improvements

- Once alignment between Logistics, Operations and Engineering on start date then start date hard coded to avoid moving target.
- In process: drop shipments at site by Vendor.
- Move to Just In Time deliveries at job site. Tied to Vendor alliances and enhanced Planning and Scheduling.
- Operations Planner separate from PMO on organization chart. Should be in same group. Can have Operations Planner as direct day to day contact with Operations, Engineering and Logistics with the PMO acting as oversee of all projects on an end to end basis.

Work Processes: Potential Improvements

- Movement to Master Schedule concept for managing end to end process. Move to Central Intake with use of Master Schedule- the flow of jobs from Engineering to Operations.
- Application of Lean principle of level loading work. Work demand is equal to supply to avoid costly peaks and valleys. i.e. need to for OT and contracting out.

Proposed Future State: Overview



Top 10 Opportunities

Opportunities

- **Opportunity One:** Reduction in obsolete inventory.
  - **How**: Review usage patterns and aging in SAP. Physical inspection. Red tag obsolete stock and move to quarantine. Set up annual write off allowance and tie to budget. Scrap and cost recovery.
  - **Value**: Estimated $1M in obsolete stock.
  - **Considerations:** Require annual write off targets. Require senior management sign off.

Opportunities cont'd

- **Opportunity Two:** Buying based on usage Patterns
  - **How**: Review 2 years of usage data available in SAP. Identify Quarterly needs. Set buying to usage requirements versus what material is in Reservation.
  - **Value**: Reservations have past due and plugged dates. Reduce the number of unplanned issues which don't align with Reservation. Reduce inventory on hand.
  - **Considerations**: Would need to do a pilot to assess whether usage patterns a better parameter of inventory requirements.

Opportunities cont'd

- **Opportunity Three:** Kit material and stage for internal crews
  - **How**: Standardize material handling with Contractors. Kit>Palletize>Shrink Wrap>Place WO >Stage>Pick up
  - Standardize handling regardless of changes to Planning and Scheduling
  - **Value**: Reduce traffic at Stores window. Move crews more quickly out of yard. Observed project orders in morning queue: 4. Estimated cost per hour per crew: $500.
  - **Considerations:** Does not eliminate parts substitution and not working to the BOM. Will still have periodic traffic at window.

Opportunities cont'd

- **Opportunity Four:** Alignment of BOM with Material pick.
  - **How**: Pre-Construction agreement on BOM between Operations, Engineering and Logistics and sign off. Data dump from SAP and/or SAP customization to generate Material pick from BOM.
  - **Value**: Can have Reservation dates past due up to 6 months with inventory sitting. Cash flow impact.
  - **Considerations:** SAP customization is expensive and time consuming. Need alignment between Engineering, Operations and Logistics. Feedback to Engineering is needed with formal Engineering Change Notice process.

Opportunities cont'd

- **Opportunity Five:** Develop Supply/Build relationships with select Contractors
  - **How**: Identify high performance Contractors with strong buying power who desire long term strategic alliances
  - **Value**: Estimated 1/3 of inventory relates to Capital work. Approximately +50% of Capital work by Contractors. Lower the cost on approx. +$.5M of inventory if Contractor supplied.
  - **Considerations:** Need to develop solid Planning and Scheduling as processes between internal crews and Contractors need to be seamless.

Opportunities cont'd

- **Opportunity Six:** Rationalize inventory levels "Provide what's needed at a minimum cost"
  - **How**: Reduce inventory on hand to cover Maintenance and Reactive work plus an allowance for Capital.
  - **Value**: Based on 12 turns per year and approximately $8M spend year, inventory level reduced to approx. $1M.
  - **Considerations:** Inventory reduction contingent on solid Planning. Move from inventory as an "insurance policy."

Opportunities cont'd

- **Opportunity Seven:** End to end Planning and Scheduling that connects Logistics, Operations and Engineering.
  - **How**:
    - Formal planning and scheduling that supports one seamless process of Forecast> Plan> Schedule> Execute Work> Report
    - Central intake for projects though Project Planning that supports end to end process
    - Key interdependencies are reflected in Project Planning at an individual Project and consolidated level
    - Level load work in Engineering and Operations

Opportunities cont'd

- **Value**:
  - Increased crew availability with Proactive planning i.e. other LDC's have unavailable factor of 40% for crews
  - Decreased need for Contractors with increased availability. Less reactive work in Q4.
  - Facilitates Contractor and Vendor alliances with solid Planning and Scheduling. Reduced inventory and enhanced buying power.
  - Reduced OT as less unplanned work.
  - Supports movement to JIT and drop shipments to site.

Opportunities cont'd

- **Considerations**: Opportunity is more of a change management initiative than a Planning exercise or IT project. Appropriate planning software is required.

Opportunities cont'd

- **Opportunity Eight:** Drop shipments to the Site
  - **How**: Identify selected specific items for drop shipment i.e. Tx, Reels, Poles. Drop ship for large capital jobs. Set up reasonable Re-Order points and Re-Order Quantities for material. Set up secure storage (i.e. containers) on site. Coordinate with Vendor.
  - **Value**: Reduce movement in and out of Stores for material and waiting time (i.e. $500 per hour per crew).
  - **Considerations:** Limited drop shipments without effective Planning and Scheduling.

Opportunities cont'd

- **Opportunity Nine:** Reduce Waiting time at Stores Window
  - **How**: Orders for consumable items i.e. gloves dropped off in Stores at end of the shift in afternoon. Stagger shift of one Stores person by an hour in afternoon to pick items and make ready for pick up the next morning.
  - **Value**: Reduce waiting time at window for Crews. Excess capacity available in Stores as per area observations
  - **Considerations:** Compliance by Crews to complete Orders in advance

Opportunities cont'd

- **Opportunity Ten:** Reduction in Stores staffing requirements.
  - **How**: Implementation of Options 1,2,3.
  - **Value**: Reduction in minimum 1 to 2 staffing requirements (estimated $100K per staff fully absorbed). Supported by area observations of Direct and Available Work. Can reallocate Direct Work from Foreman to Hourly staff.
  - **Considerations:** Require Orders that tie to an agreed upon BOM. Require minimum 2 days lead time for Material Ready.

Joint Implementation Objectives

Opportunity Bundles

Opportunities	Dependencies	Value
1 Reduction in obsolete inventory & 6S applied to yard 2. Pilot: Buying based on usage	Internal project support	Inventory reduction of a $500,000 to $1,000,000
3. Kit material and stage for internal crews 4. Align BOM with material pic	Internal project support	Crews deployed sooner @ $500/hour per crew Less in & out of stores Increase inventory turns
5. Initiate Supply/Build relationships 6. Rationalize inventory levels	Completion of (7) Planning and Scheduling will permit additional benefit	Inventory reduction of a $500,000 to $1,000,000 Inventory reduction of a $500,000 to $1,000,000

Opportunity Bundles

Opportunities	Dependencies	Value
7. End to end Planning and Scheduling, QA and support	Internal project support	Improve labour availability Reduce contractor costs currently 50% of Capital
8. Drop shipments to site: Optimize activity and benefits	Contingent on (7) Planning and Scheduling for maximum benefit	Inventory reduction of a $500,000 to $1,000,000 Inventory reduction of a $500,000 to $1,000,000
9. Reduction in wait time at Stores window 10. Reduction in staffing needs	Last Opportunities to initiate	Reduce 1 or 2 FTE's @ $100,000 each

Implementation style

- Involvement on all levels
- Constructive confrontation of issues
- A sense of urgency
- Focus on results
- Joint commitment to delivery
- Accountability for performance
- Ownership of solutions
- A requirement for honesty and an appropriate response

"Doing what we say we will do"

Next Steps

Next Steps

- Begin Joint Implementation Monday, August 13, 2012.

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Reference:

Exhibit 9, Page 17. With respect to account 1534 and 1535:

Question:

a. Please provide a full breakdown of the costs contained in Account 1534.

b. Please provide a full breakdown of costs contained in Account 1535.

Response:

a) Below is the breakdown of the costs contained in Account 1534.

Account 1534	***As of December 31, 2018***		**Amount**
Smart Grid Capital Deferral Account			
Asset #58945-0 portion attributable to Smart Grid capital		2017	55,006
GRID 20/20 Invoice 415:			
	OptaNODE DTM-GSM		
	Monthly Energy Balance Reporting Services		
	GRID Watchdog SaaS		
	GSM Communication Data Plan		
Sub- Account Accumulated Depreciation total			(2,445)
Carrying Charges total			1,342
	Total		53,904

b) Below is the breakdown of the costs contained in Account 1535.

Account 1535
As of December 31, 2018

	Description	Amount
	Smart Grid OM&A Deferral Account	
2010		
	Burlington-Grid Smart City round table	493
	EDA Operations council meeting Smart Grid planning	342
	Smart Grid Strategy INV#2671048	150,000
2011		
	Smart Energy Canada -Hyatt Regency TO	417
2012		
	Smart Grid presentation by Mearie/Elenchus/IESO/OEB -Vaughan	1,280
2014		
	Varentec-Smart Grid Fund Project	244
	Varenteco Engo Smart Grid	1,177
	GRID 20/20 DTM Pilot Project-Transformer monitor/sensor	239
	GRID 20/20 DTM Pilot Project-Transformer monitor/sensor	62
2015		
	Varentec-Smart Grid Fund Project	854
	Varenteco Engo Smart Grid	8,557
	Varenteco Engo Smart Grid	1,168
	GRID 20/20 DTM Pilot Project-Transformer monitor/sensor	12,199
	GRID 20/20 DTM Pilot Project-Transformer monitor/sensor	5,574
	GRID 20/20 DTM Pilot Project-Transformer monitor/sensor	67
	IBM communication study for Smart Grid	3,188
	IBM communication study for Smart Grid	510
	Communications network strategy	151,600
2016		
	Varenteco Engo Smart Grid	(2,787)
	Varenteco Engo Smart Grid	(241)
	GRID 20/20 DTM Pilot project	10,944
	GRID 20/20 DTM Pilot Project-Transformer monitor/sensor	4,177
	GSM Communication data plan renewal	7,499
	GSM Communication hourly reads	275
	Sub- Account Depreciation Expense total	2,445
	Carrying Charges total	25,940
	Total	386,221